

# dPCR Microbial DNA Detection

## Assays

### Assay/target list

The dPCR Microbial DNA Detection Assays are designed to test for the presence of bacterial, fungal, parasitic, viral, antibiotic resistance or virulence factor genes using digital PCR. The assays can be run on the QIAcuity® in about two hours with minimal hands-on time. The assays target over 800 bacterial, fungal, parasitic, viral, antibiotic resistance or virulence factor genes. The assay product consists of a tube containing a primer pair and a hydrolysis probe and is configurable for the dye (fluorophore). Selectable dyes are FAM, HEX, ROX, TAMRA, Cy5 and ATTO700 to enable a mix and match of up to 12 targets/ assay in a dPCR multiplex reaction. However, each assay supplies enough material to perform 200 x 40 µL dPCR reactions in Nanoplates 26k or 666 x 12 µL dPCR reactions in Nanoplates 8.5k. A reaction is run by combining the assays with the QIAcuity Probe PCR Kit (for DNA targets), the QIAcuity High Multiplex Probe PCR Kit (for DNA targets) or the QIAcuity OneStep Advanced Probe Kit (for RNA or RNA+DNA targets).

More information on the dPCR Microbial DNA Detection Assays can be found at [geneglobe.qiagen.com/applications/digital-pcr](https://geneglobe.qiagen.com/applications/digital-pcr).



## dPCR Microbial DNA Detection Assay list for Bacteria

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
	atpE	Human Pathogens, Infectious Diseases	DMA00901	Yes
[Bacteroides] pectinophilus (384638)	16S ribosomal RNA gene	Human Microbiome	DMA00052	No
[Clostridium] nexile (29361)	16S ribosomal RNA gene	Human Microbiome	DMA00108	No
[Eubacterium] infirmum (56774)	16S ribosomal RNA gene	Human Microbiome	DMA00142	Yes
[Eubacterium] siraeum (39492)	16S ribosomal RNA gene	Human Microbiome	DMA00145	No
[Haemophilus] ducreyi (730)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00164	Yes
[Ruminococcus] torques (33039)	16S ribosomal RNA gene	Human Microbiome	DMA00290	No
Abiotrophia defectiva (46125)	16S ribosomal RNA gene	Human Pathogens	DMA00001	No
Acetobacter (434)	16S Ribosomal RNA Gene	Food Production	DMA00753	Yes
Achromobacter xylooxidans (85698)	16S ribosomal RNA gene	Human Pathogens	DMA00002	No
Acinetobacter baumannii AB900 (557601)	16S ribosomal RNA gene	Infectious Diseases	DMA00004	Yes
Acinetobacter calcoaceticus (471)	16S ribosomal RNA gene	Human Pathogens, Multiple Drug Resistance	DMA00005	Yes
Acinetobacter haemolyticus (29430)	16S ribosomal RNA gene	Human Pathogens, Multiple Drug Resistance	DMA00006	Yes
Actinobacillus hominis (719)	16S ribosomal RNA gene	Human Microbiome	DMA00007	No
Actinomyces gerencseriae (52769)	16S ribosomal RNA gene	Human Pathogens	DMA00009	No
Actinomyces graevenitzi (55565)	16S ribosomal RNA gene	Infectious Diseases	DMA00010	No
Actinomyces israelii (1659)	16S ribosomal RNA gene	Infectious Diseases	DMA00011	Yes
Actinomyces lingnae (114702)	16S ribosomal RNA gene	Infectious Diseases	DMA00012	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Actinomyces naeslundii</i> (1655)	16S ribosomal RNA gene	Infectious Diseases	DMA00013	Yes
<i>Actinomyces urogenitalis</i> (103621)	16S ribosomal RNA gene	Infectious Diseases	DMA00016	No
<i>Actinomyces viscosus</i> (1656)	16S ribosomal RNA gene	Infectious Diseases	DMA00017	Yes
<i>Actinotignum schaalii</i> (59505)	gyrB	Urinary Tract Infections	DMA00741	Yes
<i>Aerococcus christensenii</i> (87541)	16S ribosomal RNA gene	Human Microbiome	DMA00018	No
<i>Aerococcus urinae</i> (1376)	16S ribosomal RNA gene	Infectious Diseases	DMA00475	No
<i>Aerococcus viridans</i> (1377)	16S ribosomal RNA gene	Infectious Diseases	DMA00019	No
<i>Aeromonas hydrophila</i> (644)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00020	No
<i>Aeromonas veronii</i> (654)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00021	No
<i>Agathobacter rectalis</i> (39491)	16S ribosomal RNA gene	Human Microbiome	DMA00143	Yes
<i>Aggregatibacter actinomycetemcomitans</i> (714)	16S ribosomal RNA gene	Infectious Diseases	DMA00022	No
<i>Aggregatibacter segnis</i> (739)	16S ribosomal RNA gene	Infectious Diseases	DMA00023	No
<i>Akkermansia muciniphila</i> (239935)	16S ribosomal RNA gene	Human Microbiome	DMA00024	Yes
<i>Alcaligenes faecalis</i> (511)	16S ribosomal RNA gene	Sepsis, Multiple Drug Resistance	DMA00025	No
<i>Aliarcobacter butzleri</i> (28197)	16S ribosomal RNA gene	Foodborne Pathogens, Multiple Drug Resistance, Sepsis	DMA00033	No
<i>Aliarcobacter skirrowii</i> (28200)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00034	No
<i>Alicyclobacillus</i> (29330)		Food Production	DMA00766	Yes
<i>Alicyclobacillus acidoterrestris</i> (1450)	vdc (vanillate decarboxylase)	Food Production	DMA00765	Yes
<i>Alistipes putredinis</i> (28117)	16S ribosomal RNA gene	Human Microbiome	DMA00026	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Alloprevotella tannerae</i> (76122)	16S ribosomal RNA gene	Human Microbiome	DMA00273	No
<i>Anaerobutyricum hallii</i> (39488)	16S ribosomal RNA gene	Human Microbiome	DMA00141	Yes
<i>Anaerococcus hydrogenalis</i> (33029)	16S ribosomal RNA gene	Human Microbiome	DMA00027	No
<i>Anaerococcus lactolyticus</i> (33032)	16S ribosomal RNA gene	Human Microbiome	DMA00028	No
<i>Anaerococcus prevotii</i> (33034)	16S ribosomal RNA gene	Human Microbiome	DMA00029	No
<i>Anaeroglobus geminatus</i> (156456)	16S ribosomal RNA gene	Human Microbiome	DMA00030	No
<i>Anaerostipes caccae</i> (105841)	16S ribosomal RNA gene	Human Microbiome	DMA00031	No
<i>Anaerotruncus colihominis</i> (169435)	16S ribosomal RNA gene	Human Microbiome	DMA00032	No
<i>Arachnia propionica</i> (1750)	16S ribosomal RNA gene	Human Microbiome	DMA00276	No
<i>Bacillus anthracis</i> (1392)	16S ribosomal RNA gene	Human Pathogens	DMA00040	Yes
<i>Bacillus atrophaeus</i> (1452)		Urinary Tract Infections	DMA00739	Yes
<i>Bacillus cereus</i> (1396)	16S ribosomal RNA gene	Probiotics, Food Production, Infectious Diseases	DMA00041	Yes
<i>Bacillus licheniformis</i> (1402)	16S ribosomal RNA gene	Food Production, Infectious Diseases	DMA00042	Yes
<i>Bacillus subtilis</i> (1423)	16S ribosomal RNA gene	Probiotics, Gastrointestinal Infections	DMA00043	Yes
Bacteria (2)	16S ribosomal RNA gene	Bacterial Load	DMA00347	Yes
Bacteria (2)	16S ribosomal RNA gene	Bacterial Load	DMA00348	Yes
<i>Bacteroides</i> (816)	<i>Bacteroides</i> 16S ribosomal RNA gene (HF183)	Positive Control Assay	DMA00721	Yes
<i>Bacteroides</i> (816)	16S rRNA gene	Human Microbiome, Gastrointestinal Infections	DMA00992	Yes
<i>Bacteroides caccae</i> (47678)	16S ribosomal RNA gene	Human Microbiome	DMA00044	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Bacteroides eggerthii</i> (28111)	16S ribosomal RNA gene	Human Microbiome	DMA00048	No
<i>Bacteroides fragilis</i> (817)	16S ribosomal RNA gene	Human Microbiome	DMA00049	Yes
<i>Bacteroides intestinalis</i> (329854)	16S ribosomal RNA gene	Human Microbiome	DMA00050	Yes
<i>Bacteroides ovatus</i> (28116)	16S ribosomal RNA gene	Human Microbiome	DMA00051	No
<i>Bacteroides</i> sp. 2_2_4 (469590)	16S ribosomal RNA gene	Human Microbiome	DMA00054	No
<i>Bacteroides</i> sp. 4_3_47FAA (457394)	16S ribosomal RNA gene	Human Microbiome	DMA00055	No
<i>Bacteroides stercoris</i> (46506)	16S ribosomal RNA gene	Human Pathogens	DMA00056	No
<i>Bacteroides thetaiotaomicron</i> (818)	16S ribosomal RNA gene	Human Microbiome	DMA00057	Yes
Betaproteobacteria (28216)	int11	Antibiotic Resistance (AMR), Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00092	Yes
<i>Bifidobacterium</i> (1678)	16S rRNA gene	Probiotics, Human Microbiome, Food Production, Fermentation and Degradation, Non-pathogen	DMA00090	Yes
<i>Bifidobacterium adolescentis</i> (1680)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00060	Yes
<i>Bifidobacterium bifidum</i> (1681)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00061	Yes
<i>Bifidobacterium breve</i> (1685)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00062	Yes
<i>Bifidobacterium dentium</i> (1689)	16S ribosomal RNA gene	Human Microbiome	DMA00063	Yes
<i>Bifidobacterium longum</i> (216816)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00064	Yes
<i>Bifidobacterium pseudocatenulatum</i> (28026)	16S ribosomal RNA gene	Human Microbiome	DMA00065	Yes
<i>Bifidobacterium scardovii</i> (158787)	16S ribosomal RNA gene	Human Microbiome	DMA00066	Yes
<i>Blautia coccooides</i> (1532)	16S ribosomal RNA gene	Human Microbiome	DMA00404	Yes

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<i>Blautia hydrogenotrophica</i> (53443)	16S ribosomal RNA gene	Human Microbiome	DMA00067	No
<i>Blautia obeum</i> (40520)	16S ribosomal RNA gene	Human Microbiome	DMA00289	No
<i>Bordetella bronchiseptica</i> (518), <i>Bordetella holmesii</i> (35814), <i>Bordetella parapertussis</i> (519), <i>Bordetella pertussis</i> (520)	16S ribosomal RNA gene	Human Pathogens	DMA00068	No
<i>Bordetella parapertussis</i> (519)	ISL3-like element IS1001 family transposase gene	Human Pathogens	DMA00402	Yes
<i>Bordetella pertussis</i> (520)	Giguanylate cyclase gene	Human Pathogens	DMA00401	Yes
<i>Borrelia burgdorferi</i> (139)		Tropical & Vector-borne Diseases	DMA00792	Yes
<i>Brevibacillus agri</i> (51101)	16S ribosomal RNA gene	Human Pathogens	DMA00069	No
<i>Brevibacillus brevis</i> (1393)	16S ribosomal RNA gene	Infectious Diseases	DMA00070	No
<i>Brevibacterium casei</i> (33889)	16S ribosomal RNA gene	Food Production, Infectious Diseases	DMA00071	No
<i>Brevundimonas diminuta</i> (293)	16S ribosomal RNA gene	Infectious Diseases	DMA00072	No
<i>Brevundimonas vesicularis</i> (41276)	16S ribosomal RNA gene	Infectious Diseases	DMA00073	No
<i>Brucella anthropi</i> (529)	16S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00240	No
<i>Burkholderia cepacia</i> (292)	16S ribosomal RNA gene	Human Pathogens	DMA00074	No
<i>Burkholderia gladioli</i> (28095)	16S ribosomal RNA gene	Food Production, Infectious Diseases	DMA00075	No
<i>Burkholderia mallei</i> (13373)	16S ribosomal RNA gene	Infectious Diseases	DMA00076	No
<i>Butyrivibrio pullicaecorum</i> (501571)	16S ribosomal RNA gene	Human Microbiome	DMA00077	No
<i>Butyrivibrio crossotus</i> (45851)	16S ribosomal RNA gene	Human Microbiome	DMA00078	No
<i>Butyrivibrio fibrisolvens</i> (831)	16S ribosomal RNA gene	Human Microbiome	DMA00079	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Campylobacter (194)	16S ribosomal RNA gene	Infectious Diseases, Food Production, Human Pathogens	DMA00355	Yes
Campylobacter coli (195)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00080	Yes
Campylobacter coli (195), Campylobacter jejuni (197), Campylobacter lari (201)	16S ribosomal RNA gene	Food Testing	DMA00850	Yes
Campylobacter concisus (199)	16S ribosomal RNA gene	Human Microbiome	DMA00081	Yes
Campylobacter fetus (196)	16S ribosomal RNA gene	Food Production, Infectious Diseases	DMA00082	Yes
Campylobacter gracilis (824)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00083	Yes
Campylobacter jejuni (197)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00084	Yes
Campylobacter rectus (203)	16S ribosomal RNA gene	Infectious Diseases	DMA00085	Yes
Campylobacter showae (204)	16S ribosomal RNA gene	Human Microbiome	DMA00086	Yes
Campylobacter sputorum (206)	16S ribosomal RNA gene	Food Production, Human Microbiome	DMA00087	Yes
Campylobacter upsaliensis (28080)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00088	Yes
Campylobacter ureolyticus (827)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00058	No
Capnocytophaga gingivalis (1017)	16S ribosomal RNA gene	Human Microbiome	DMA00094	No
Capnocytophaga granulosa (45242)	16S ribosomal RNA gene	Human Microbiome	DMA00095	No
Capnocytophaga ochracea (1018)	16S ribosomal RNA gene	Human Microbiome	DMA00096	No
Capnocytophaga sputigena (1019)	16S ribosomal RNA gene	Human Microbiome	DMA00097	No
Cardiobacterium hominis (2718)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00098	No
Catelicoccus marimammalium (300419)	16S ribosomal RNA gene	Human Microbiome	DMA00099	No
Catenibacterium mitsuokai (100886)	16S ribosomal RNA gene	Human Microbiome	DMA00100	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Catonella morbi (43997)	16S ribosomal RNA gene	Human Microbiome	DMA00101	No
Chlamydia pneumoniae (83558)	16S ribosomal RNA gene	Infectious Diseases	DMA00103	No
Chlamydia psittaci (83554)	16S ribosomal RNA gene	Infectious Diseases	DMA00104	No
Chlamydia trachomatis (813)	16S ribosomal RNA gene	Infectious Diseases	DMA00102	No
Citrobacter (544)	methionine ABC transporter permease	Human Microbiome, Gastrointestinal Infections, Human Pathogens, Urinary Tract Infections	DMA00989	Yes
Citrobacter freundii (546)	16S ribosomal RNA gene	Human Microbiome, Wastewater & Drinking Water Epidemiology, Food Production	DMA00105	No
Citrobacter youngae (133448)	16S ribosomal RNA gene	Infectious Diseases	DMA00106	No
Clostridioides difficile (1496)	16S ribosomal RNA gene	Multiple Drug Resistance, Sepsis, Infectious Diseases, Wastewater & Drinking Water Epidemiology	DMA00107	Yes
Clostridium (1485)	16S rRNA gene	Foodborne Pathogens, Gastrointestinal Infections, Infectious Diseases, Food Testing	DMA00991	Yes
Clostridium botulinum (1491)	16S ribosomal RNA gene	Food Testing	DMA00849	Yes
Clostridium perfringens (1502)	16S ribosomal RNA gene	Human Pathogens	DMA00109	Yes
Clostridium septicum (1504)	16S ribosomal RNA gene	Human Pathogens	DMA00110	No
Clostridium sp. M62/1 (411486)	16S ribosomal RNA gene	Human Microbiome	DMA00112	Yes
Clostridium sp. SS2/1 (411484)	16S ribosomal RNA gene	Human Microbiome	DMA00113	Yes
Clostridium sporogenes (1509)	16S rRNA	Human Pathogens, Food Production	DMA00910	Yes
Clostridium tetani (1513)	16S ribosomal RNA gene	Human Pathogens	DMA00114	Yes
Collinsella aerofaciens (74426)	16S ribosomal RNA gene	Human Microbiome	DMA00115	No



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Coprococcus comes (410072)	16S ribosomal RNA gene	Human Microbiome	DMA00116	No
Coprococcus eutactus (33043)	16S ribosomal RNA gene	Human Microbiome	DMA00117	No
Corynebacterium (1716)	16S rRNA gene	Human Pathogens, Infectious Diseases, Human Microbiome	DMA00998	Yes
Corynebacterium aurimucosum (169292)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00118	Yes
Corynebacterium diphtheriae (1717)	16S ribosomal RNA gene	Human Pathogens	DMA00119	Yes
Corynebacterium diphtheriae (1717)	rpoB	Tropical & Vector-borne Diseases	DMA00717	Yes
Corynebacterium durum (61592)	16S ribosomal RNA gene	Human Microbiome	DMA00120	Yes
Corynebacterium matruchotii (43768)	16S ribosomal RNA gene	Human Microbiome	DMA00121	Yes
Corynebacterium pseudodiphtheriticum (37637)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00122	Yes
Corynebacterium riegelii (156976)	rpoB	Urinary Tract Infections	DMA00742	Yes
Corynebacterium ulcerans (65058)	rpoB	Tropical & Vector-borne Diseases	DMA00794	Yes
Coxiella burnetii (777)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00123	No
Cronobacter (413496)	Macromolecular synthesis (MMS) operon	Food Production, Infectious Diseases	DMA00694	Yes
Cronobacter sakazakii (28141)	16S ribosomal RNA gene	Food Testing	DMA00847	Yes
Cutibacterium acnes (1747)	16S ribosomal RNA gene	Human Microbiome	DMA00275	No
Cutibacterium acnes (1747)	16S rRNA	Human Microbiome	DMA00921	Yes
Cutibacterium avidum (33010)	16S rRNA	Human Microbiome	DMA00920	Yes
Cutibacterium granulosum (33011)	16S rRNA	Human Microbiome	DMA00922	Yes
Cutibacterium sp. (1912221)	16S rRNA	Human Microbiome	DMA00914	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Cylindrospermopsis raciborskii</i> (77022)		Wastewater & Drinking Water Epidemiology	DMA00813	Yes
<i>Desulfovibrio desulfuricans</i> (876)	16S ribosomal RNA gene	Infectious Diseases	DMA00124	No
<i>Desulfovibrio piger</i> (901)	16S ribosomal RNA gene	Human Microbiome	DMA00125	No
<i>Dialister invisus</i> (218538)	16S ribosomal RNA gene	Human Microbiome	DMA00127	No
<i>Dialister pneumosintes</i> (39950)	16S ribosomal RNA gene	Infectious Diseases	DMA00128	No
<i>Dolichospermum</i> (748770)	geoA	Wastewater & Drinking Water Epidemiology	DMA00764	Yes
<i>Dorea formicigenerans</i> (39486)	16S ribosomal RNA gene	Human Microbiome	DMA00129	No
<i>Eggerthella sinensis</i> (242230)	16S ribosomal RNA gene	Human Pathogens	DMA00130	No
<i>Ehrlichia canis</i> (944)	16S ribosomal RNA gene	Animal Disease	DMA00131	No
<i>Eikenella corrodens</i> (539)	16S ribosomal RNA gene	Human Microbiome	DMA00132	No
<i>Elizabethkingia meningoseptica</i> (238)	16S ribosomal RNA gene	Infectious Diseases	DMA00133	No
<i>Enterobacter cloacae</i> (550)	16S ribosomal RNA gene	Infectious Diseases, Wastewater & Drinking Water Epidemiology, Multiple Drug Resistance	DMA00134	Yes
<i>Enterobacter cloacae</i> (550)	Outer membrane porin C (ompC) gene	Infectious Diseases, Wastewater & Drinking Water Epidemiology, Multiple Drug Resistance	DMA00449	Yes
<i>Enterobacter</i> sp. (42895)	16S rRNA	Wastewater & Drinking Water Epidemiology, Bioburden, Human Pathogens	DMA00895	Yes
<i>Enterococcus casseliflavus</i> (37734)	16S ribosomal RNA gene	Infectious Diseases	DMA00135	Yes
<i>Enterococcus faecalis</i> (1351)	16S ribosomal RNA gene	Probiotics, Wastewater & Drinking Water Epidemiology, Infectious Diseases	DMA00136	Yes
<i>Enterococcus faecalis</i> (1351)	23S ribosomal RNA gene	Probiotics, Wastewater & Drinking Water	DMA00446	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
		Epidemiology, Infectious Diseases		
<i>Enterococcus faecium</i> (1352)	16S ribosomal RNA gene	Probiotics, Infectious Diseases, Sepsis	DMA00137	Yes
<i>Enterococcus italicus</i> (246144)	16S ribosomal RNA gene	Food Production	DMA00138	Yes
<i>Erwinia amylovora</i> (552)	16s rRNA	Plant Pathogens / Food Spoilage, Food Production	DMA00903	Yes
<i>Erysipelothrix rhusiopathiae</i> (1648)	16S ribosomal RNA gene	Food Production	DMA00139	No
<i>Escherichia coli</i> (562)	16S ribosomal RNA gene	Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00140	Yes
<i>Escherichia coli</i> (562)	Shiga toxin 1 subunit A (stx1A) gene	Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00696	Yes
<i>Escherichia coli</i> (562)	Shiga toxin 2 subunit A (stx2A) gene	Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00697	Yes
<i>Escherichia coli</i> (562)	<i>E. coli</i> attaching and effacing (eae) gene	Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00698	No
<i>Escherichia coli</i> (562)	GDP-perosamine synthase RfB <sub>E</sub> /PerA gene	Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00699	No
<i>Escherichia coli</i> O157:H7 (83334)		Food Testing	DMA00851	Yes
<i>Eubacterium ventriosum</i> (39496)	16S ribosomal RNA gene	Human Microbiome	DMA00146	Yes
<i>Exiguobacterium aurantiacum</i> (33987)	16S ribosomal RNA gene	Infectious Diseases	DMA00147	No
<i>Faecalibacterium prausnitzii</i> (853)	16S ribosomal RNA gene	Human Microbiome	DMA00148	Yes
<i>Fannyhessea vaginae</i> (82135)	16S ribosomal RNA gene	Human Microbiome	DMA00039	Yes
<i>Filifactor alocis</i> (143361)	16S ribosomal RNA gene	Human Microbiome, Human Pathogens	DMA00149	No
<i>Finegoldia magna</i> (1260)	16S ribosomal RNA gene	Human Microbiome	DMA00150	Yes
<i>Francisella tularensis</i> (263)	16S ribosomal RNA gene	Food Production	DMA00151	No

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Fructilactobacillus lindneri (53444)	Phenylalanyl-tRNA synthase alpha subunit (pheS) gene	Probiotics, Fermentation and Degradation	DMA00385	No
Fusobacterium mortiferum (850)	16S ribosomal RNA gene	Human Microbiome	DMA00152	No
Fusobacterium necrophorum (859)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00153	Yes
Fusobacterium nucleatum (851)	16S ribosomal RNA gene	Human Microbiome	DMA00154	Yes
Fusobacterium periodonticum (860)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00155	Yes
Fusobacterium varium (856)	16S ribosomal RNA gene	Human Microbiome	DMA00156	Yes
Gardnerella vaginalis 409-05 (553190)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00157	Yes
Gardnerella vaginalis 409-05 (553190)	Sialidase A gene	Human Microbiome, Infectious Diseases	DMA00408	No
Gemella bergeri (84136)	16S ribosomal RNA gene	Infectious Diseases	DMA00158	No
Gemella haemolysans (1379)	16S ribosomal RNA gene	Human Microbiome	DMA00159	No
Gemella morbillorum (29391)	16S ribosomal RNA gene	Infectious Diseases	DMA00160	No
Geobacillus stearothermophilus (1422)	16S ribosomal RNA gene	Food Production	DMA00161	No
Gleimia europaea (66228)	16S ribosomal RNA gene	Human Pathogens	DMA00008	No
Gluconobacter (441)	16S Ribosomal RNA Gene	Food Production	DMA00768	Yes
Granulicatella adiacens (46124)	16S ribosomal RNA gene	Infectious Diseases	DMA00162	No
Granulicatella elegans (137732)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00163	No
Haemophilus influenzae (727)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases, Sepsis	DMA00165	Yes
Haemophilus parainfluenzae (729)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases, Sepsis	DMA00166	Yes
Hafnia alvei (569)	16S ribosomal RNA gene	Human Microbiome, Food Production	DMA00167	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Helicobacter cinaedi</i> (213)	16S ribosomal RNA gene	Infectious Diseases	DMA00168	Yes
<i>Helicobacter fennelliae</i> (215)	16S ribosomal RNA gene	Infectious Diseases	DMA00169	Yes
<i>Helicobacter pylori</i> (210)	16S rRNA gene	Gastrointestinal Infections, Human Pathogens, Infectious Diseases, Human Microbiome, Wastewater & Drinking Water Epidemiology	DMA00956	Yes
<i>Hoyleseella buccalis</i> (28127)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00263	No
<i>Hoyleseella loescheii</i> (840)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00268	No
<i>Hoyleseella oralis</i> (28134)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00271	Yes
<i>Inquilinus ginsengisoli</i> (363840), <i>Inquilinus limosus</i> (171674)	16S ribosomal RNA gene	Human Pathogens	DMA00171	No
<i>Kingella denitrificans</i> (502)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00172	No
<i>Kingella kingae</i> (504)	16S ribosomal RNA gene	Infectious Diseases	DMA00173	No
<i>Klebsiella aerogenes</i> (548)	UbiD family decarboxylase gene	Infectious Diseases	DMA00448	Yes
<i>Klebsiella granulomatis</i> (39824)	16S ribosomal RNA gene	Human Pathogens	DMA00174	Yes
<i>Klebsiella oxytoca</i> (571)	npsB	Urinary Tract Infections	DMA00740	Yes
<i>Klebsiella pneumoniae</i> (573)	Glycerol dehydratase large subunit (gldA) gene	Human Pathogens, Infectious Diseases	DMA00367	Yes
<i>Lachnoanaerobaculum saburreum</i> (467210)	16S ribosomal RNA gene	Human Microbiome	DMA00144	No
<i>Lachnobacterium bovis</i> (140626)	16S ribosomal RNA gene	Food Production	DMA00176	No
<i>Lactacaseibacillus casei</i> (1582)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00178	Yes
<i>Lactacaseibacillus rhamnosus</i> (47715)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00186	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Lactiplantibacillus plantarum (1590)	16S ribosomal RNA gene	Probiotics, Human Microbiome	DMA00185	Yes
Lactobacillus (1578)	16S Ribosomal RNA Gene	Food Production	DMA00759	Yes
Lactobacillus (1578)	16S Ribosomal RNA Gene	Food Production	DMA00760	Yes
Lactobacillus (1578)	16S rRNA gene	Probiotics, Human Microbiome, Food Production, Fermentation and Degradation, Non-pathogen, Positive Control Assay	DMA00982	Yes
Lactobacillus acidophilus (1579)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00177	Yes
Lactobacillus crispatus (47770)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00179	Yes
Lactobacillus delbrueckii (1584)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00180	No
Lactobacillus gasseri (1596)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00182	No
Lactobacillus iners (147802)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00183	Yes
Lactobacillus jensenii (109790)	16S ribosomal RNA gene	Human Microbiome	DMA00184	No
Lactococcus garvieae (1363)	16S ribosomal RNA gene	Food Production	DMA00189	No
Lactococcus lactis (1358)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00190	No
Lancefieldella parvula (1382)	16S ribosomal RNA gene	Human Microbiome	DMA00037	Yes
Lancefieldella rimae (1383)	16S ribosomal RNA gene	Human Microbiome	DMA00038	Yes
Latilactobacillus curvatus (28038)	Phenylalanyl-tRNA synthase alpha subunit (pheS) gene	Probiotics	DMA00384	No
Lautropia mirabilis (47671)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00191	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Legionella (445)	16S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00705	Yes
Legionella longbeachae (450)	23S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00363	Yes
Legionella pneumophila (446)	16S ribosomal RNA gene	Infectious Diseases	DMA00192	Yes
Legionella pneumophila (446)	Macrophage infectivity potentiator (mip) surface protein gene	Environmental Microbes, Infectious Diseases	DMA00706	Yes
Legionella pneumophila serogroup 1 (66976)		Wastewater & Drinking Water Epidemiology	DMA00778	Yes
Leifsonia aquatica (144185)	16S ribosomal RNA gene	Infectious Diseases	DMA00193	No
Lentilactobacillus buchneri (1581)	Phenylalanyl-tRNA synthase alpha subunit (pheS) gene	Probiotics, Food Production, Biocontrol	DMA00382	No
Leptospira (171)	LipL32-45F	Infectious Diseases, Human Pathogens, Animal Disease, Wastewater & Drinking Water Epidemiology	DMA00975	Yes
Leptospira interrogans (173)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00194	Yes
Leptotrichia buccalis (40542)	16S ribosomal RNA gene	Human Microbiome	DMA00196	No
Leptotrichia wadei (157687)	16S ribosomal RNA gene	Human Microbiome	DMA00198	No
Levilactobacillus brevis (1580)	Recombinase (recA) gene	Probiotics	DMA00381	No
Ligilactobacillus salivarius (1624)	16S ribosomal RNA gene	Human Microbiome	DMA00187	No
Limosilactobacillus fermentum (1613)	16S ribosomal RNA gene	Probiotics, Human Microbiome, Food Production	DMA00181	No
Limosilactobacillus vaginalis (1633)	16S ribosomal RNA gene	Human Microbiome	DMA00188	Yes
Listeria (1637)	Invasion associated protein p60 (iap) gene	Infectious Diseases, Food Production, Human Pathogens	DMA00695	Yes
Listeria grayi (1641)	Invasion associated protein p60 (iap) gene	Probiotics, Food Production, Environmental Microbes	DMA00707	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Listeria monocytogenes</i> (1639)	16S ribosomal RNA gene	Infectious Diseases, Food Production, Human Pathogens	DMA00199	Yes
<i>Loigolactobacillus coryniformis</i> (1610)	RNA polymerase alpha subunit (rpoA) gene	Probiotics	DMA00383	No
<i>Lysinibacillus fusiformis</i> (28031)	16S ribosomal RNA gene	Infectious Diseases, Sepsis	DMA00200	No
<i>Magseeibacillus indolicus</i> (884684)	16S ribosomal RNA gene	Human Microbiome	DMA00409	No
<i>Massilia timonae</i> (47229)	16S ribosomal RNA gene	Infectious Diseases, Human Pathogens	DMA00201	No
<i>Mediterraneibacter gnavus</i> (33038)	16S ribosomal RNA gene	Human Microbiome	DMA00288	No
<i>Megasphaera cerevisiae</i> (39029)	16S ribosomal RNA gene	Food Production	DMA00386	No
<i>Megasphaera genomsp. type_1</i> (699192)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases, Human Pathogens	DMA00405	No
<i>Megasphaera genomsp. type_2</i> (699193)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases, Human Pathogens	DMA00406	No
<i>Megasphaera micronuciformis</i> (187326)	16S ribosomal RNA gene	Infectious Diseases, Human Pathogens	DMA00202	No
<i>Megasphaera sp. DJF_B143</i> (537288)	16S ribosomal RNA gene	Food Production	DMA00203	No
<i>Mesomycoplasma hyopneumoniae</i> (2099)	Mhp183	Animal Disease	DMA00977	Yes
<i>Metamycoplasma hominis</i> (2098)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00223	Yes
<i>Metamycoplasma hominis</i> (2098)	Membrane protein insertase YidC gene	Human Pathogens, Infectious Diseases	DMA00410	No
<i>Metamycoplasma orale</i> (2121)	16S ribosomal RNA gene	Human Microbiome	DMA00224	No
<i>Methanobrevibacter smithii</i> (2173)	RNA polymerase subunit B-like (rpoB) gene	Human Microbiome	DMA00491	No
<i>Methylobacterium fujisawaense</i> (107400)	16S ribosomal RNA gene	Infectious Diseases	DMA00204	No
<i>Methylobacterium mesophilicum</i> (39956)	16S ribosomal RNA gene	Infectious Diseases	DMA00205	No



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Methylobacterium zatmanii (29429)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00206	No
Microbacterium binotii (462710)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00207	No
Micrococcus luteus (1270)	16S ribosomal RNA gene	Human Microbiome, Environmental Microbes	DMA00208	No
Mitsuokella multacida (52226)	16S ribosomal RNA gene	Human Microbiome	DMA00209	No
Mobiluncus (2050)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00413	No
Mobiluncus curtisii (2051)	16S ribosomal RNA gene	Human Microbiome	DMA00210	Yes
Mobiluncus mulieris (2052)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00211	Yes
Mobiluncus sp. (47293)		Sexually Transmitted Infections (STI)	DMA00723	Yes
Mogibacterium timidum (35519)	16S ribosomal RNA gene	Human Microbiome	DMA00212	No
Moraxella catarrhalis (480)	16S ribosomal RNA gene	Human Pathogens	DMA00213	Yes
Moraxella lacunata (477)	16S ribosomal RNA gene	Human Pathogens	DMA00214	Yes
Morganella morganii (582)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00215	No
Mycobacterium avium (1764)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases, Multiple Drug Resistance	DMA00217	No
Mycobacterium canetti (78331), Mycobacterium tuberculosis (1773), Mycobacterium tuberculosis variant africanum (33894), Mycobacterium tuberculosis variant bovis (1765), Mycobacterium tuberculosis variant bovis BCG (33892), Mycobacterium tuberculosis variant microti (1806), Mycobacterium tuberculosis variant pinnipedii (194542)	ext-RD9	Human Pathogens, Infectious Diseases	DMA00928	Yes
Mycobacterium intracellulare (1767)	16S ribosomal RNA gene	Human Pathogens	DMA00219	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Mycobacterium leprae</i> (1769)	rlep	Human Pathogens, Tropical & Vector-borne Diseases	DMA00899	Yes
<i>Mycobacterium marinum</i> (1781)		Animal Disease	DMA00779	Yes
<i>Mycobacterium tuberculosis</i> (1773)	16S ribosomal RNA gene	Human Pathogens	DMA00221	Yes
<i>Mycobacterium tuberculosis</i> variant <i>africanum</i> (33894)	16S ribosomal RNA gene	Human Pathogens	DMA00216	No
<i>Mycobacterium tuberculosis</i> variant <i>bovis</i> (1765)	gatC-gatA	Animal Disease	DMA00924	Yes
<i>Mycobacterium ulcerans</i> (1809)	IS2404	Human Pathogens, Infectious Diseases, Tropical & Vector-borne Diseases	DMA00900	Yes
<i>Mycobacteroides abscessus</i> (36809)	Intergenic spacer region	Infectious Diseases, Multiple Drug Resistance	DMA00414	No
<i>Mycobacteroides chelonae</i> (1774)	16S ribosomal RNA gene	Wastewater & Drinking Water Epidemiology, Infectious Diseases	DMA00218	No
<i>Mycobacteroides chelonae</i> (1774)	Porin precursor gene	Wastewater & Drinking Water Epidemiology, Infectious Diseases	DMA00417	No
<i>Mycolicibacterium fortuitum</i> (1766)	ITS1 ribosomal RNA gene	Infectious Diseases	DMA00415	No
<i>Mycolicibacterium sphagni</i> (1786)	16S ribosomal RNA gene	Human Pathogens	DMA00220	No
<i>Mycoplasma wenyonii</i> (65123)		Animal Disease	DMA00806	Yes
<i>Mycoplasma genitalium</i> (2097)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00222	Yes
<i>Mycoplasma pneumoniae</i> (2104)	16S ribosomal RNA gene	Infectious Diseases	DMA00225	Yes
<i>Neisseria bacilliformis</i> (267212)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00226	No
<i>Neisseria elongata</i> (495)	16S ribosomal RNA gene	Infectious Diseases	DMA00227	No
<i>Neisseria flavescens</i> (484)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00228	No
<i>Neisseria gonorrhoeae</i> (485)	16S ribosomal RNA gene	Infectious Diseases	DMA00229	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Neisseria lactamica</i> (486)	16S ribosomal RNA gene	Human Microbiome	DMA00230	No
<i>Neisseria meningitidis</i> (487)	16S ribosomal RNA gene	Human Pathogens	DMA00231	Yes
<i>Neisseria mucosa</i> (488)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00232	Yes
<i>Neisseria sicca</i> (490)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00233	No
<i>Neisseria subflava</i> (28449)	16S ribosomal RNA gene	Human Microbiome	DMA00234	No
<i>Neorickettsia risticii</i> (950)	16S ribosomal RNA gene	Animal Disease	DMA00235	No
<i>Neorickettsia sennetsu</i> (951)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00003	Yes
<i>Nitratidesulfovibrio vulgaris</i> (881)	16S ribosomal RNA gene	Human Microbiome	DMA00126	No
<i>Nocardia asteroides</i> (1824)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00236	No
<i>Nocardia farcinica</i> (37329)	16S ribosomal RNA gene	Infectious Diseases	DMA00237	No
<i>Nocardioides</i> sp. NS/27 (223904)	16S ribosomal RNA gene	Environmental Microbes	DMA00238	No
<i>Novosphingobium</i> sp. K39 (188732)	16S ribosomal RNA gene	Environmental Microbes	DMA00239	No
<i>Oenococcus</i> (46254)	16S Ribosomal RNA Gene	Food Production	DMA00767	Yes
<i>Oribacterium sinus</i> (237576)	16S ribosomal RNA gene	Infectious Diseases	DMA00241	No
<i>Oxalobacter formigenes</i> (847)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00490	No
<i>Paenibacillus larvae</i> (1464)	16S ribosomal RNA gene	Animal Disease	DMA00242	No
<i>Paenibacillus macerans</i> (44252)	16S ribosomal RNA gene	Environmental Microbes	DMA00243	No
<i>Paenibacillus thiaminolyticus</i> (49283)	16S ribosomal RNA gene	Infectious Diseases	DMA00244	No
<i>Pantoea ananatis</i> (553)	16S ribosomal RNA gene	Infectious Diseases	DMA00245	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Pantoea stewartii</i> (66269)		Food Production	DMA00801	Yes
<i>Papillibacter cinnamivorans</i> (100176)	16S ribosomal RNA gene	Fermentation and Degradation	DMA00246	No
<i>Parabacteroides distasonis</i> (823)	16S ribosomal RNA gene	Human Microbiome, Probiotics, Human Pathogens	DMA00247	No
<i>Parabacteroides merdae</i> (46503)	16S ribosomal RNA gene	Human Microbiome	DMA00248	No
<i>Paraclostridium sordellii</i> (1505)	16S ribosomal RNA gene	Infectious Diseases	DMA00111	No
<i>Paracoccus marcusii</i> (59779)	16S ribosomal RNA gene	Food Production, Fermentation and Degradation	DMA00249	No
<i>Parvimonas micra</i> (33033)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00250	No
<i>Pasteurella multocida</i> (747)	16S ribosomal RNA gene	Human Pathogens	DMA00251	No
<i>Pectinatus</i> (864)	16S rRNA gene	Food Production, Plant Pathogens / Food Spoilage, Fermentation and Degradation	DMA00954	Yes
<i>Pectinatus cerevisiiphilus</i> (86956)	Flagellin (flaA) gene	Food Production	DMA00387	No
<i>Pectinatus frisingensis</i> (865)	23S ribosomal RNA gene	Food Production	DMA00388	No
<i>Pediococcus</i> (1253)	23S rRNA gene	Probiotics, Food Production, Fermentation and Degradation, Plant Pathogens / Food Spoilage	DMA00955	Yes
<i>Pediococcus acidilactici</i> (1254)	16S ribosomal RNA gene	Probiotics, Human Microbiome	DMA00252	No
<i>Pediococcus damnosus</i> (51663)	Ribosomal protein L2P (rplB) gene	Food Production	DMA00389	No
<i>Pediococcus pentosaceus</i> (1255)	16S ribosomal RNA gene	Food Production, Fermentation and Degradation	DMA00253	No
<i>Peptoniphilus asaccharolyticus</i> (1258)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00254	No
<i>Peptostreptococcus</i> (1257)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases, Multiple Drug Resistance	DMA00412	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Peptostreptococcus anaerobius</i> (1261)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00255	No
<i>Peptostreptococcus stomatis</i> (341694)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00256	No
<i>Phocaecicola coprocola</i> (310298)	16S ribosomal RNA gene	Human Microbiome	DMA00045	No
<i>Phocaecicola coprophilus</i> (387090)	16S ribosomal RNA gene	Human Microbiome	DMA00046	No
<i>Phocaecicola dorei</i> (357276)	16S ribosomal RNA gene	Human Microbiome	DMA00047	No
<i>Phocaecicola plebeius</i> (310297)	16S ribosomal RNA gene	Human Microbiome	DMA00053	No
<i>Phocaecicola vulgatus</i> (821)	16S ribosomal RNA gene	Gastrointestinal Infections	DMA00059	Yes
<i>Plesiomonas shigelloides</i> (703)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00257	Yes
<i>Porphyromonas asaccharolytica</i> (28123)	16S ribosomal RNA gene	Infectious Diseases	DMA00259	No
<i>Porphyromonas endodontalis</i> (28124)	16S ribosomal RNA gene	Infectious Diseases	DMA00260	No
<i>Porphyromonas gingivalis</i> (837)	16S ribosomal RNA gene	Infectious Diseases	DMA00261	No
<i>Prescottella equi</i> (43767)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00284	No
<i>Prevotella</i> (838)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00411	No
<i>Prevotella bivia</i> (28125)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00262	Yes
<i>Prevotella denticola</i> (28129)	16S ribosomal RNA gene	Human Microbiome, Fermentation and Degradation	DMA00265	No
<i>Prevotella disiens</i> (28130)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00266	Yes
<i>Prevotella intermedia</i> (28131)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00267	No
<i>Prevotella melaninogenica</i> (28132)	16S ribosomal RNA gene	Human Microbiome, Human Pathogens	DMA00269	No
<i>Prevotella nigrescens</i> (28133)	16S ribosomal RNA gene	Infectious Diseases	DMA00270	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Prevotella veroralis</i> (28137)	16S ribosomal RNA gene	Human Microbiome	DMA00274	No
<i>Proteus mirabilis</i> (584)	Intergenic region	Infectious Diseases	DMA00474	Yes
<i>Proteus mirabilis</i> (584)	ureR	Urinary Tract Infections	DMA00745	Yes
<i>Proteus vulgaris</i> (585)		Urinary Tract Infections	DMA00743	Yes
<i>Providencia</i> (586)	16S rRNA gene	Human Microbiome, Gastrointestinal Infections, Human Pathogens, Urinary Tract Infections	DMA00993	Yes
<i>Providencia stuartii</i> (588)	Omp1	Urinary Tract Infections	DMA00744	Yes
<i>Pseudanabaena</i> (1152)	MIB synthase	Wastewater & Drinking Water Epidemiology	DMA00763	Yes
<i>Pseudoleptotrichia goodfellowii</i> (157692)	16S ribosomal RNA gene	Human Microbiome	DMA00197	No
<i>Pseudomonas aeruginosa</i> (287)	16S ribosomal RNA gene	Infectious Diseases, Multiple Drug Resistance	DMA00278	Yes
<i>Pseudomonas putida</i> (303)	16S ribosomal RNA gene	Biocontrol, Fermentation and Degradation	DMA00279	Yes
<i>Pseudomonas straminea</i> (47882)	16S ribosomal RNA gene	Environmental Microbes	DMA00280	Yes
<i>Pseudoramibacter alactolyticus</i> (113287)	16S ribosomal RNA gene	Infectious Diseases	DMA00281	No
<i>Rahnella aquatilis</i> (34038)	16S ribosomal RNA gene	Infectious Diseases, Sepsis	DMA00282	No
<i>Ralstonia pickettii</i> (329)	16S ribosomal RNA gene	Environmental Microbes	DMA00283	No
<i>Rickettsia rickettsii</i> (783)		Tropical & Vector-borne Diseases	DMA00802	Yes
<i>Rothia dentocariosa</i> (2047)	16S ribosomal RNA gene	Human Microbiome	DMA00285	No
<i>Rothia kristinae</i> (37923)	16S ribosomal RNA gene	Human Microbiome	DMA00175	No
<i>Rothia mucilaginosa</i> (43675)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00286	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Ruminococcus bromii (40518)	16S ribosomal RNA gene	Human Microbiome	DMA00287	No
Salmonella (590)	Invasion protein (invA) gene	Human Pathogens, Wastewater & Drinking Water Epidemiology, Food Production	DMA00704	Yes
Salmonella enterica (28901)	16S ribosomal RNA gene	Human Pathogens, Wastewater & Drinking Water Epidemiology, Food Production	DMA00291	Yes
Salmonella enterica subsp. enterica (59201)	Tetrathionate reductase subunit TtrC	Human Pathogens, Infectious Diseases	DMA00360	Yes
Salmonella enterica subsp. enterica serovar Enteritidis (149539)	16S ribosomal RNA gene	Food Testing	DMA00848	Yes
Salmonella enterica subsp. enterica serovar Typhimurium (90371)	16S ribosomal RNA gene	Food Testing	DMA00846	Yes
Scardovia wiggisiae (230143)	Heat shock protein 60 gene	Infectious Diseases	DMA00399	No
Schaalia odontolytica (1660)	16S ribosomal RNA gene	Infectious Diseases	DMA00014	Yes
Schaalia radingae (131110)	16S ribosomal RNA gene	Infectious Diseases	DMA00015	No
Segatella copri (165179)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00264	No
Segatella oris (28135)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00272	No
Selenomonas infelix (135082)	16S ribosomal RNA gene	Human Pathogens, Human Microbiome	DMA00292	No
Selenomonas noxia (135083)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00293	No
Selenomonas sputigena (69823)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00294	No
Serratia marcescens (615)		Urinary Tract Infections	DMA00749	Yes
Shigella (620)	ipaH	Food Production, Foodborne Pathogens, Food Testing, Gastrointestinal Infections, Human Pathogens, Infectious Diseases	DMA00978	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Shigella dysenteriae</i> (622)	16S ribosomal RNA gene	Human Pathogens	DMA00295	Yes
<i>Shigella sonnei</i> (624)	Recombinase family protein gene	Gastrointestinal Infections	DMA00361	Yes
<i>Shuttleworthella satelles</i> (177972)	16S ribosomal RNA gene	Human Microbiome	DMA00296	No
<i>Sneathia sanguinegens</i> (40543)	16S ribosomal RNA gene	Human Microbiome	DMA00297	No
<i>Sneathia vaginalis</i> (187101)	16S ribosomal RNA gene	Human Microbiome	DMA00195	No
<i>Solobacterium moorei</i> (102148)	16S ribosomal RNA gene	Infectious Diseases, Sepsis	DMA00298	No
<i>Sphingomonas bisphenolicum</i> (296544)	16S ribosomal RNA gene	Fermentation and Degradation	DMA00300	No
<i>Sphingomonas paucimobilis</i> (13689)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00299	No
<i>Sporobacter termitidis</i> (44749)	16S ribosomal RNA gene	Environmental Microbes, Fermentation and Degradation	DMA00301	No
<i>Staphylococcus</i> (1279)	elongation factor Tu (tuf)	Human Pathogens, Infectious Diseases, Urinary Tract Infections, Foodborne Pathogens, Food Testing	DMA00996	Yes
<i>Staphylococcus aureus</i> (1280)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00302	Yes
<i>Staphylococcus capitis</i> (29388)	FAD-dependent urate hydroxylase	Human Microbiome	DMA00913	Yes
<i>Staphylococcus caprae</i> (29380)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00303	Yes
<i>Staphylococcus epidermidis</i> (1282)	16S ribosomal RNA gene	Sepsis, Multiple Drug Resistance	DMA00304	Yes
<i>Staphylococcus lugdunensis</i> (28035)	Ornithine decarboxylase speF gene	Human Microbiome, Infectious Diseases	DMA00416	No
<i>Staphylococcus saprophyticus</i> (29385)	16S ribosomal RNA gene	Infectious Diseases	DMA00305	No
<i>Stenotrophomonas maltophilia</i> (40324)	16S ribosomal RNA gene	Infectious Diseases, Multiple Drug Resistance	DMA00306	No
<i>Streptobacillus moniliformis</i> (34105)	16S ribosomal RNA gene	Infectious Diseases	DMA00307	No



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Streptococcus agalactiae (1311)	16S ribosomal RNA gene	Infectious Diseases	DMA00308	No
Streptococcus anginosus (1328)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00309	No
Streptococcus australis (113107)	16S ribosomal RNA gene	Human Microbiome	DMA00310	No
Streptococcus constellatus (76860)	16S ribosomal RNA gene	Human Microbiome	DMA00311	No
Streptococcus downei (1317)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00312	No
Streptococcus gordonii (1302)	16S ribosomal RNA gene	Human Microbiome	DMA00313	No
Streptococcus infantis (68892)	16S ribosomal RNA gene	Human Pathogens, Human Microbiome	DMA00314	No
Streptococcus mitis (28037)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00315	Yes
Streptococcus mutans (1309)	16S ribosomal RNA gene	Human Microbiome	DMA00316	No
Streptococcus oralis (1303)	16S ribosomal RNA gene	Human Microbiome	DMA00317	Yes
Streptococcus pneumoniae (1313)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00318	Yes
Streptococcus pyogenes (1314)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00319	Yes
Streptococcus salivarius (1304)	16S ribosomal RNA gene	Human Microbiome, Probiotics	DMA00320	Yes
Streptococcus sanguinis (1305)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00321	No
Streptococcus sinensis (176090)	16S ribosomal RNA gene	Infectious Diseases	DMA00322	No
Streptococcus sobrinus (1310)	Glucan-binding protein C2 (gbpC2) gene	Infectious Diseases	DMA00400	No
Streptococcus suis (1307)	16S ribosomal RNA gene	Food Production	DMA00323	No
Streptomyces bikiniensis (1896)	16S ribosomal RNA gene	Environmental Microbes, Biocontrol	DMA00324	No
Streptomyces griseus (1911)	16S ribosomal RNA gene	Environmental Microbes, Biocontrol	DMA00325	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Streptomyces somaliensis</i> (78355)	16S ribosomal RNA gene	Human Pathogens	DMA00326	No
<i>Subdoligranulum variabile</i> (214851)	16S ribosomal RNA gene	Human Microbiome	DMA00327	No
<i>Tannerella forsythia</i> (28112)	16S ribosomal RNA gene	Infectious Diseases	DMA00328	No
<i>Thermoactinomyces</i> (2023)	16S ribosomal RNA gene	Environmental Microbes, Infectious Diseases, Food Production	DMA00370	No
<i>Treponema denticola</i> (158)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00329	No
<i>Treponema pallidum</i> (160)	16S ribosomal RNA gene	Human Pathogens	DMA00330	No
<i>Treponema pallidum</i> (160)	tpp47	Sexually Transmitted Infections (STI)	DMA00729	Yes
<i>Treponema socranskii</i> (53419)	16S ribosomal RNA gene	Infectious Diseases	DMA00331	No
<i>Tropheryma whipplei</i> (2039)	WiSP family protein gene	Human Pathogens	DMA00854	Yes
<i>Turicibacter sanguinis</i> (154288)	16S ribosomal RNA gene	Human Pathogens	DMA00333	No
<i>Ureaplasma parvum</i> (134821)	16S ribosomal RNA gene	Human Microbiome	DMA00334	No
<i>Ureaplasma urealyticum</i> (2130)	16S ribosomal RNA gene	Human Pathogens	DMA00335	No
<i>Varibaculum cambriense</i> (184870)	16S ribosomal RNA gene	Infectious Diseases	DMA00336	No
<i>Veillonella dispar</i> (39778)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00337	No
<i>Veillonella parvula</i> (29466)	16S ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00338	No
<i>Vibrio alginolyticus</i> (663)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00339	No
<i>Vibrio cholerae</i> (666)	16S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00340	Yes
<i>Vibrio parahaemolyticus</i> (670)	16S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00341	Yes
<i>Vibrio vulnificus</i> (672)	16S ribosomal RNA gene	Environmental Microbes	DMA00342	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Weissella confusa (1583)	16S ribosomal RNA gene	Environmental Microbes, Biocontrol, Fermentation and Degradation	DMA00343	No
Xylella fastidiosa (2371)	rimM	Plant Pathogens / Food Spoilage	DMA00719	Yes
Yersinia enterocolitica (630)	16S ribosomal RNA gene	Human Pathogens	DMA00344	Yes
Yersinia pestis (632)	16S ribosomal RNA gene	Human Pathogens	DMA00345	Yes

#### dPCR Microbial DNA Detection Assay list for Biomarkers

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
fam19a4	FAM19A4 methylation	Sexually Transmitted Infections (STI), Human Pathogens, Infectious Diseases, Positive Control Assay	DMA00964	Yes

#### dPCR Microbial DNA Detection Assay list for Environmental samples

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
uncultured bacterium (77133)	16S Ribosomal RNA Gene	Sexually Transmitted Infections (STI)	DMA00727	Yes
uncultured Megasphaera sp. (165188)	16S Ribosomal RNA Gene	Sexually Transmitted Infections (STI)	DMA00730	Yes

#### dPCR Microbial DNA Detection Assay list for Invertebrates

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Ancylostoma duodenale (51022)	ITS ribosomal RNA gene	Human Pathogens	DMA00466	No
Anisakis pegreffii (303229)	mt cox2	Animal Disease	DMA00828	Yes
Anisakis simplex (6269)	mt cox2	Animal Disease	DMA00829	Yes
Ascaris lumbricoides (6252)	ITS ribosomal RNA gene	Human Pathogens	DMA00467	No
Ascaris lumbricoides (6252)	ITS1	Human Pathogens, Animal Disease	DMA00929	Yes
Cryptosporidium cuniculus (564424), Cryptosporidium hominis (237895),	Oocyst wall protein gene (COWP)	Human Pathogens, Infectious Diseases	DMA00356	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Cryptosporidium parvum (5807)				
Cyclospora cayetanensis (88456)	ITS	Tropical & Vector-borne Diseases	DMA00774	Yes
Dientamoeba fragilis (43352)	18S ribosomal RNA gene	Human Pathogens	DMA00357	No
Endolimax nana (110788)	18S ribosomal RNA gene	Environmental Microbes	DMA00468	No
Entamoeba coli (110766)	18S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00469	Yes
Entamoeba histolytica (5759)	18S ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00358	Yes
Enterobius vermicularis (51028)	5S ribosomal RNA gene	Human Pathogens	DMA00366	No
Giardia intestinalis (5741)	18S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00359	Yes
Hysterothylacium aduncum (118886)	mt cox2	Animal Disease	DMA00833	Yes
Ichthyophthirius multifiliis (5932)	18S	Animal Disease	DMA00827	Yes
Leishmania (5658)	mkDNA	Tropical & Vector-borne Diseases	DMA00771	Yes
Leishmania braziliensis (5660)	mkDNA	Tropical & Vector-borne Diseases	DMA00772	Yes
Naegleria fowleri (5763)	ITS	Tropical & Vector-borne Diseases	DMA00776	Yes
Necator americanus (51031)	ITS ribosomal RNA gene	Human Pathogens	DMA00470	No
Neospora caninum (29176)	Neo_VLA	Animal Disease	DMA00976	Yes
Pentatrichomonas hominis (5728)	18S ribosomal RNA gene	Human Microbiome	DMA00471	No
Phocanema bulbosa (172674)	mt cox2	Animal Disease	DMA00831	Yes
Phocanema krabbei (172673)	mt cox2	Animal Disease	DMA00832	Yes
Plasmodium falciparum (5833)	mtDNA	Tropical & Vector-borne Diseases	DMA00735	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Plasmodium knowlesi (5850)	mtDNA	Tropical & Vector-borne Diseases	DMA00738	Yes
Plasmodium knowlesi (5850)	18S rRNA gene	Tropical & Vector-borne Diseases, Infectious Diseases	DMA00965	Yes
Plasmodium malariae (5858)		Tropical & Vector-borne Diseases	DMA00773	Yes
Plasmodium ovale (36330)	mtDNA	Tropical & Vector-borne Diseases	DMA00736	Yes
Plasmodium vivax (5855)	mtDNA	Tropical & Vector-borne Diseases	DMA00737	Yes
Pseudoterranova decipiens (6271)	mt cox2	Animal Disease	DMA00830	Yes
Rodentolepis nana (102285)	ITS2 ribosomal RNA gene	Human Pathogens	DMA00362	No
Strongyloides (6247)	28S rRNA gene	Gastrointestinal Infections, Infectious Diseases, Tropical & Vector-borne Diseases	DMA00959	Yes
Taeniidae (6208)	COX1	Gastrointestinal Infections, Infectious Diseases	DMA00957	Yes
Trichomonas vaginalis (5722)	G3 hypothetical protein gene	Human Pathogens, Infectious Diseases	DMA00332	No
Trichuris trichiura (36087)	18S ribosomal RNA gene	Human Pathogens	DMA00364	No
Trypanosoma brucei (5691)	minichromosomeSatelite	Tropical & Vector-borne Diseases	DMA00752	Yes
Trypanosoma cruzi (5693)		Tropical & Vector-borne Diseases	DMA00791	Yes

#### dPCR Microbial DNA Detection Assay list for Mammals

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Bos taurus (9913)	Non-coding genomic DNA	Food Production	DMA00403	No

#### dPCR Microbial DNA Detection Assay list for Phages

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Escherichia phage MS2 (12022)		Non-pathogen	DMA00775	Yes

## dPCR Microbial DNA Detection Assay list for Plants and Fungi

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Alternaria alternata</i> (5599)	Mating type protein MAT1-2 gene	Environmental Microbes, Infectious Diseases	DMA00481	No
<i>Aspergillus</i> (5052)	28S ribosomal RNA gene	Infectious Diseases, Food Production, Human Pathogens	DMA00346	Yes
<i>Aspergillus</i> (5052), <i>Penicillium</i> (5073)	ITS1, 5.8S and ITS2 ribosomal RNA	Environmental Microbes, Infectious Diseases	DMA00369	Yes
<i>Aspergillus brasiliensis</i> (319629)	5.8S rRNA gene	Plant Pathogens / Food Spoilage, Environmental Microbes, Fungal Infections	DMA00987	Yes
<i>Aspergillus flavus</i> (5059)	ITS1, 5.8S and ITS2 ribosomal RNA	Food Production, Infectious Diseases	DMA00035	No
<i>Aspergillus flavus</i> (5059)	ITS1 and 5.8S ribosomal RNA gene	Environmental Microbes, Food Production, Infectious Diseases	DMA00398	Yes
<i>Aspergillus fumigatus</i> (746128)	28S ribosomal RNA gene	Food Production, Infectious Diseases	DMA00036	Yes
<i>Aspergillus niger</i> (5061)	ITS1 and 5.8S ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00365	Yes
<i>Aspergillus terreus</i> (33178)	Cis-aconitate decarboxylase (cadA) gene	Environmental Microbes, Infectious Diseases	DMA00477	Yes
<i>Aspergillus terreus</i> (33178)	ITS ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00489	Yes
<i>Aspergillus versicolor</i> (46472)	Mitochondrial small ribosomal RNA gene	Environmental Microbes, Infectious Diseases	DMA00482	Yes
<i>Blastocystis hominis</i> (12968)	18S ribosomal RNA gene	Human Pathogens	DMA00354	No
<i>Brettanomyces bruxellensis</i> (5007)		Plant Pathogens / Food Spoilage	DMA00718	Yes
<i>Candida albicans</i> (5476)	28S ribosomal RNA gene	Infectious Diseases	DMA00089	Yes
<i>Candida auris</i> (498019)	ITS	Fungal Infections	DMA00793	Yes
<i>Candida dubliniensis</i> (42374)	Intron sequence of the actin 1 (ACT1) gene	Infectious Diseases	DMA00407	Yes
<i>Candida parapsilosis</i> (5480)	ITS1, 5.8S and ITS2 ribosomal RNA	Infectious Diseases	DMA00092	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Candida tropicalis</i> (5482)	28S ribosomal RNA gene	Gastrointestinal Infections, Infectious Diseases	DMA00093	Yes
<i>Cercospora beticola</i> (122368)	28s rRNA	Plant Pathogens / Food Spoilage, Food Production	DMA00912	Yes
<i>Cryptococcus gattii</i> (37769)		Fungal Infections	DMA00781	Yes
<i>Curvularia lunata</i> (5503)	Glyceraldehyde 3-phosphate dehydrogenase gene	Environmental Microbes, Infectious Diseases	DMA00483	No
Debaryomycetaceae (766764)	5.8S rRNA gene	Fermentation and Degradation, Environmental Microbes, Food Production	DMA00988	Yes
<i>Ecytonucleospora hepatopenaei</i> (646526)	18S ribosomal RNA gene	Food Production	DMA00451	No
<i>Enterocytozoon</i> (27971)	rRNA small subunit	Gastrointestinal Infections, Infectious Diseases, Wastewater & Drinking Water Epidemiology, Human Pathogens	DMA00963	Yes
<i>Epidermophyton floccosum</i> (34391)	ITS ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00478	No
<i>Erysiphe necator</i> (52586)	cytB	Food Production	DMA00777	Yes
Fungi (4751)	18S and ITS1 ribosomal RNA gene	Fungal Load	DMA00391	Yes
Fungi (4751)	18S and ITS1 ribosomal RNA gene	Fungal Load	DMA00393	Yes
Fungi (4751)	18S and ITS1 ribosomal RNA gene	Fungal Load	DMA00394	No
<i>Fusarium acuminatum</i> (5515)	elongation factor EF1 $\alpha$	Food Production	DMA00824	Yes
<i>Fusarium avenaceum</i> (40199)	elongation factor EF1 $\alpha$	Food Production	DMA00822	Yes
<i>Fusarium culmorum</i> (5516)	elongation factor EF1 $\alpha$	Food Production	DMA00826	Yes
<i>Fusarium graminearum</i> (5518)	elongation factor EF1 $\alpha$	Food Production	DMA00820	Yes
<i>Fusarium redolens</i> (48865)	elongation factor EF1 $\alpha$	Food Production	DMA00825	Yes
<i>Fusarium solani</i> (169388)	Beta tubulin gene	Environmental Microbes, Infectious Diseases	DMA00479	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Fusarium sp. (29916)	elongation factor EF1 $\alpha$	Food Production	DMA00834	Yes
Fusarium sporotrichioides (5514)	elongation factor EF1 $\alpha$	Food Production	DMA00823	Yes
Geotrichum candidum (1173061)	cox2	Food Production, Fermentation and Degradation, Plant Pathogens / Food Spoilage, Environmental Microbes, Human Microbiome	DMA00994	Yes
Lachancea thermotolerans (381046)		Food Production	DMA00799	Yes
Metschnikowia pulcherrima (27326)		Food Production	DMA00800	Yes
Microsporidia (6029)	rRNA small subunit	Gastrointestinal Infections, Infectious Diseases, Animal Disease, Wastewater & Drinking Water Epidemiology	DMA00958	Yes
Microsporium audouinii (34393)	Translation elongation factor 1-alpha (tef-1-alpha) gene	Human Microbiome, Infectious Diseases	DMA00460	No
Microsporium canis (63405)	Translation elongation factor 1-alpha (tef-1-alpha) gene	Human Microbiome, Infectious Diseases	DMA00461	No
Mucor hiemalis (64493)	18S ribosomal RNA gene	Food Production, Fermentation and Degradation	DMA00368	Yes
Nakaseomyces glabratus (5478)	28S ribosomal RNA gene	Infectious Diseases	DMA00090	Yes
Nakaseomyces glabratus (5478)	16S Ribosomal RNA Gene	Fungal Infections	DMA00780	Yes
Neoscytalidium dimidiatum (108428)	Translation elongation factor 1 alpha gene	Infectious Diseases	DMA00480	No
Pichia kudriavzevii (4909)	28S ribosomal RNA gene	Food Production, Wastewater & Drinking Water Epidemiology, Infectious Diseases	DMA00091	Yes
Pneumocystis jirovecii (42068)	Mitochondrial large ribosomal RNA gene	Human Pathogens, Infectious Diseases	DMA00258	No
Saccharomyces (4930)	ch14	Food Production	DMA00761	Yes
Saccharomyces (4930)	ch14	Food Production	DMA00762	Yes



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
<i>Saccharomyces cerevisiae</i> (4932)	Golgi transport complex subunit COG6	Food Production	DMA00758	Yes
<i>Sarocladium strictum</i> (5046)	28S ribosomal RNA gene	Infectious Diseases	DMA00476	Yes
<i>Scopulariopsis brevicaulis</i> (561152)	18S ribosomal RNA gene	Infectious Diseases, Multiple Drug Resistance	DMA00484	No
<i>Starmerella bacillaris</i> (1247836)	ITS	Food Production	DMA00821	Yes
<i>Starmerella stellata</i> (45594)		Food Production	DMA00798	Yes
<i>Stenocarpella macrospora</i> (371126)		Food Production	DMA00819	Yes
<i>Stenocarpella maydis</i> (238245)		Food Production	DMA00803	Yes
<i>Torulaspota delbrueckii</i> (4950)		Food Production	DMA00805	Yes
<i>Trichophyton benhamiae</i> (63400)		Animal Disease	DMA00804	Yes
<i>Trichophyton indotineae</i> (2739387)		Tropical & Vector-borne Diseases	DMA00812	Yes
<i>Trichophyton interdigitale</i> (101480)	Intein PRP8 gene	Infectious Diseases	DMA00463	No
<i>Trichophyton mentagrophytes</i> (523103)	Succinate dehydrogenase complex, subunit B (sdhB) gene	Human Microbiome, Infectious Diseases	DMA00464	No
<i>Trichophyton rubrum</i> (5551)	ITS ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00450	No
<i>Trichophyton tonsurans</i> (34387)	ITS ribosomal RNA gene	Human Microbiome, Infectious Diseases	DMA00462	No
<i>Trichophyton verrucosum</i> (63417)	Mating type protein MAT1-2-1 gene	Food Production, Infectious Diseases	DMA00465	No
<i>Zygosaccharomyces bailii</i> (4954)	Golgi transport complex subunit COG6	Food Testing	DMA00879	Yes
<i>Zygosaccharomyces rouxii</i> (4956)	Golgi transport complex subunit COG6	Food Testing	DMA00878	Yes
<i>Zymoseptoria tritici</i> (1047171)	ITS2	Plant Pathogens / Food Spoilage, Food Production	DMA00911	Yes

#### dPCR Microbial DNA Detection Assay list for Primates

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Homo sapiens (9606)	human RNase P gene	Positive Control Assay	DMA00720	Yes

#### dPCR Microbial DNA Detection Assay list for Resistance Gene

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
aac(6')-Ib	Bacterial aminoglycoside N-acetyltransferase AAC(6')-Ib4 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00579	Yes
Aminoglycoside resistance	Bacterial fluoroquinolone-acetylating aminoglycoside 6'-N-acetyltransferase AAC(6')-Ib-cr5 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00492	No
Aminoglycoside-resistance	Bacterial AAC(3)-I family aminoglycoside 3-N-acetyltransferase gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00493	No
Aminoglycoside-resistance	Bacterial aminoglycoside N-acetyltransferase AAC(3)-Iid gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00494	No
Aminoglycoside-resistance	Bacterial aminoglycoside N-acetyltransferase AAC(3)-Iva gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00495	No
Aminoglycoside-resistance	Bacterial ANT(3'')-Ia family aminoglycoside nucleotidyltransferase AadA1 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00496	No
Aminoglycoside-resistance	Bacterial aminoglycoside nucleotidyltransferase ANT(2'')-Ia gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00497	No
Aminoglycoside-resistance	Bacterial aminoglycoside O-phosphotransferase APH(3')-Via gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00498	No
ant-Ia	Bacterial aminoglycoside nucleotidyltransferase ANT(2'')-Ia gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00580	No
aph(3)	Bacterial APH(3')-VI family aminoglycoside O-phosphotransferase gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00581	No
Beta-lactam resistance	Bacterial PBP2a family beta-lactam-resistant peptidoglycan transpeptidase gene MecA	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00499	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
bla CTX-M (CTX-M-2, -M-8 and -M-25)	Beta-lactamase CTX-M (bla CTX-M) gene	Antibiotic Resistance (AMR)	DMA00843	Yes
Class A beta-lactamase	Bacterial class A extended spectrum beta-lactamase BES-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00500	Yes
Class A beta-lactamase	Bacterial carbapenem-hydrolyzing class A beta-lactamase BIC-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00501	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase CTX-M-15 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00502	Yes
Class A beta-lactamase	Bacterial extended-spectrum beta-lactamase CTX-M-8 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00503	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase CTX-M-9 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00504	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase GES-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00505	Yes
Class A beta-lactamase	Bacterial carbapenem-hydrolysing class A beta-lactamase NmcA gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00506	No
Class A beta-lactamase	Bacterial carbapenem-hydrolyzing class A beta-lactamase KPC-2 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00507	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase PER-1	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00508	Yes
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase PER-14 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00509	No
Class A beta-lactamase	Bacterial carbapenem-hydrolyzing class A beta-lactamase SFC-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00510	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase SFO-1 gene	Beta-lactam Resistance, Antibiotic Resistance	DMA00511	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
		(AMR), Multiple Drug Resistance		
Class A beta-lactamase	Bacterial class A broad-spectrum beta-lactamase SHV-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00512	No
Class A beta-lactamase	Bacterial SHV family beta-lactamase gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00513	No
Class A beta-lactamase	Bacterial SHV family beta-lactamase gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00514	No
Class A beta-lactamase	Bacterial class A broad-spectrum beta-lactamase SHV-11 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00515	No
Class A beta-lactamase	Bacterial class A broad-spectrum beta-lactamase SHV-11 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00516	No
Class A beta-lactamase	Bacterial class A broad-spectrum beta-lactamase SHV-11 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00517	No
Class A beta-lactamase	Bacterial class A broad-spectrum beta-lactamase SHV-11 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00518	No
Class A beta-lactamase	Bacterial SME family beta-lactamase gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00519	No
Class A beta-lactamase	Bacterial class A extended-spectrum beta-lactamase TLA-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00520	No
Class A beta-lactamase	Bacterial class A beta-lactamase VEB gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00521	Yes
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase CfiA gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00522	No
Class B beta-lactamase	Bacterial class B beta-lactamase IMP-1 gene	Beta-lactam Resistance, Antibiotic Resistance	DMA00523	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
		(AMR), Multiple Drug Resistance		
Class B beta-lactamase	Bacterial class B1 metallo-beta-lactamase IMP-12 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00524	No
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase IMP-2	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00525	No
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase IMP-5	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00526	No
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase NDM-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00527	Yes
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase VIM1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00528	Yes
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase VIM-13 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00529	No
Class B beta-lactamase	Bacterial subclass B1 metallo-beta-lactamase VIM-7 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00530	No
Class C beta-lactamase	Bacterial cephalosporin-hydrolyzing class C beta-lactamase ACC-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00531	Yes
Class C beta-lactamase	Bacterial AMPC cephalosporinase precursor protein ACC-3 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00532	No
Class C beta-lactamase	Bacterial cephalosporin-hydrolyzing class C beta-lactamase ACT-5 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00533	No
Class C beta-lactamase	Bacterial cephalosporin-hydrolyzing class C beta-lactamase ACT-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00534	No
Class C beta-lactamase	Bacterial CMY-2 family cephalosporin-	Beta-lactam Resistance, Antibiotic Resistance	DMA00535	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
	hydrolyzing class C beta-lactamase CFE-1 gene	(AMR), Multiple Drug Resistance		
Class C beta-lactamase	Bacterial CMY-1/MOX family class C beta-lactamase MOX-14 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00536	No
Class C beta-lactamase	Bacterial class C beta-lactamase DHA-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00537	Yes
Class C beta-lactamase	Bacterial cephalosporin-hydrolyzing class C beta-lactamase FOX gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00538	Yes
Class C beta-lactamase	Bacterial CMY-2 family cephalosporin-hydrolyzing class C beta-lactamase LAT-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00539	No
Class C beta-lactamase	Bacterial cephalosporin-hydrolyzing class C beta-lactamase MIR-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00540	No
Class C beta-lactamase	Bacterial CMY-1/MOX family class C beta-lactamase MOX-1 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00541	No
Class D beta-lactamase	Bacterial oxacillin-hydrolyzing class D beta-lactamase OXA-10 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00542	Yes
Class D beta-lactamase	Bacterial class D extended-spectrum beta-lactamase OXA-18 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00543	No
Class D beta-lactamase	Bacterial OXA-2 family class D beta-lactamase OXA-2 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00544	No
Class D beta-lactamase	Bacterial OXA-23 family carbapenem-hydrolyzing class D beta-lactamase OXA-967 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00545	Yes
Class D beta-lactamase	Bacterial carbapenem-hydrolyzing class D beta-lactamase OXA-24 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00546	No
Class D beta-lactamase	Bacterial oxacillin-hydrolyzing class D	Beta-lactam Resistance, Antibiotic Resistance	DMA00547	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
	extended-spectrum beta-lactamase OXA-45 gene	(AMR), Multiple Drug Resistance		
Class D beta-lactamase	Bacterial OXA-48 family class D beta-lactamase OXA-1055 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00548	Yes
Class D beta-lactamase	Bacterial OXA-50 family oxacillin-hydrolyzing class D beta-lactamase OXA-50 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00549	No
Class D beta-lactamase	Bacterial OXA-51 family carbapenem-hydrolyzing class D beta-lactamase OXA-51 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00550	No
Class D beta-lactamase	Bacterial OXA-48 family carbapenem-hydrolyzing class D beta-lactamase OXA-54 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00551	No
Class D beta-lactamase	Bacterial arapenem-hydrolyzing class D beta-lactamase OXA-55 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00552	No
Class D beta-lactamase	Bacterial carbapenem-hydrolyzing class D beta-lactamase OXA-58 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00553	Yes
Class D beta-lactamase	Bacterial carbapenem-hydrolyzing class D beta-lactamase OXA-60 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00554	No
Class D beta-lactamase	Bacterial carbapenem-hydrolyzing class D beta-lactamase OXA-62 gene	Beta-lactam Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00555	No
dfra17	Bacterial trimethoprim-resistant dihydrofolate reductase DfrA17 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00582	No
E. coli gyrA (S83L)	Bacterial DNA topoisomerase (ATP-hydrolyzing) subunit A (gyrA) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00591	No
E. coli gyrA (S83W)	Bacterial DNA topoisomerase (ATP-hydrolyzing) subunit A (gyrA) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00592	No
Erythromycin resistance	Bacterial EreB family erythromycin esterase gene	Erythromycin Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00556	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Fluoroquinolone resistance	Bacterial fluoroquinolone efflux MFS transporter QepA1 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00557	Yes
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrA1 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00558	Yes
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrB1 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00559	Yes
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrB31 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00560	No
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrB4 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00561	No
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrB5 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00562	No
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrB8 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00563	No
Fluoroquinolone resistance	Bacterial QnrC family quinolone resistance pentapeptide repeat protein gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00564	No
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrD1 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00565	No
Fluoroquinolone resistance	Bacterial quinolone resistance pentapeptide repeat protein QnrS1 gene	Fluoroquinolone Resistance, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00566	Yes
fosA (Klebsiella sp.)	Bacterial FosA family fosfomycin resistance glutathione transferase gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00583	Yes
fosA (Pseudomonas sp.)	Bacterial FosA family fosfomycin resistance glutathione transferase gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00584	Yes



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Macrolide Lincosamide Streptogramin_b	Bacterial 23S rRNA (adenine(2058)-N(6))-methyltransferase Erm(A) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00567	Yes
Macrolide Lincosamide Streptogramin_b	Bacterial adenine(2058)-N(6)-dimethyltransferase Erm(B) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00568	Yes
Macrolide Lincosamide Streptogramin_b	Bacterial erythromycin resistance protein ErmC gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00569	No
Macrolide Lincosamide Streptogramin_b	Bacterial macrolide efflux MFS transporter (mefA) gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00570	No
Macrolide Lincosamide Streptogramin_b	Bacterial ABC-F type ribosomal protection protein Msr(A) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00571	No
mcr1	mcr1	Antibiotic Resistance (AMR)	DMA00796	Yes
mecC	MecC	Antibiotic Resistance (AMR)	DMA00795	Yes
Multidrug efflux pump protein OqxA (E. coli, Klebsiella sp., Salomella sp.)	Bacterial multidrug efflux RND transporter periplasmic adaptor subunit OqxA gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00585	Yes
Multidrug efflux pump protein OqxB	Bacterial multidrug efflux RND transporter permease subunit OqxB gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00586	No
Multidrug resistance efflux pump	Bacterial multidrug efflux transporter outer membrane subunit OprJ gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00572	Yes
Multidrug resistance efflux pump	Bacterial multidrug efflux RND transporter outer membrane channel subunit OprM gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00573	Yes
qnrB	qnrB	Antibiotic Resistance (AMR)	DMA00797	Yes
sul1	Bacterial quaternary ammonium compound efflux SMR transporter QacE delta 1 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00587	Yes
sul2	Bacterial sulfonamide-resistant dihydropteroate synthase Sul2 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00588	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
TEM	Bacterial class A broad-spectrum beta-lactamase TEM-1 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00589	Yes
tetA(C)	tetA(C)	Antibiotic Resistance (AMR)	DMA00769	Yes
tetK	tet(K)	Antibiotic Resistance (AMR)	DMA00751	Yes
tetM	Bacterial tetracycline resistance ribosomal protection protein Tet(M) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00590	No
Tetracycline efflux pump	Bacterial tetracycline efflux MFS transporter Tet(A) gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00574	Yes
Tetracycline efflux pump	Bacterial tetracycline efflux MFS transporter Tet(B) gene	Drug Efflux Pump, Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00575	Yes
tetS	Bacterial tetracycline resistance ribosomal protection protein Tet(S) gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00593	No
tetW	tetracycline resistance (tetW) gene	Antibiotic Resistance (AMR)	DMA00842	Yes
VanA	Bacterial D-alanine--(R)-lactate ligase VanA gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00578	No
VanA	Bacterial D-alanine--(R)-lactate ligase VanA gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00594	No
VanB	Bacterial D-alanine--(R)-lactate ligase VanB gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00576	Yes
VanC	Bacterial D-alanine--D-serine ligase VanC1 gene	Antibiotic Resistance (AMR), Multiple Drug Resistance	DMA00577	Yes

#### dPCR Microbial DNA Detection Assay list for Resistance Genes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
hora	horA	Fermentation and Degradation, Food Production, Plant Pathogens / Food Spoilage	DMA00962	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
horc	horC	Fermentation and Degradation, Food Production, Plant Pathogens / Food Spoilage	DMA00961	Yes

#### dPCR Microbial DNA Detection Assay list for Virulence Gene

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
aatA	Bacterial outer membrane protein (aatA) gene	Microbial Virulence	DMA00595	No
accessory cholera enterotoxin	Bacterial accessory cholera enterotoxin gene	Microbial Virulence	DMA00597	Yes
adhesion and penetration protein	Bacterial autotransporter outer membrane beta-barrel domain-containing protein gene	Microbial Virulence	DMA00632	No
alpha-clostripain	Bacterial alpha-clostripain gene	Microbial Virulence	DMA00604	No
Alpha-Hemolysin precursor	Bacterial alpha-hemolysin hla gene	Microbial Virulence	DMA00633	No
attachment invasion locus protein	Bacterial attachment invasion locus protein gene	Microbial Virulence	DMA00598	No
autoinducer synthesis protein LasI	Bacterial acyl-homoserine-lactone synthase LasI gene	Microbial Virulence	DMA00649	No
autolysin	Bacterial autolysin (N-acetylmuramoyl-L-alanine amidase) (Mureinhydrolase, Mucopeptide aminohydrolase, Cell wall hydrolase) gene	Microbial Virulence	DMA00653	No
BepB protein	Bacterial T4SS effector adenylyltransferase BepC gene	Microbial Virulence	DMA00601	No
beta-hemolysin	Bacterial sphingomyelinase hlb gene	Microbial Virulence	DMA00634	No
bile salt hydrolase	Bacterial linear amide C-N hydrolase gene	Microbial Virulence	DMA00602	No
chaperone protein PsaB precursor	Bacterial chaperone protein PsaB gene	Microbial Virulence	DMA00666	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
cholera enterotoxin, A subunit	Bacterial cholera enterotoxin catalytic subunit CtxA gene	Microbial Virulence	DMA00609	No
collagen adhesin protein	Bacterial collagen-binding MSCRAMM adhesin Ace gene	Microbial Virulence	DMA00596	Yes
endocarditis specific antigen	Bacterial metal ABC transporter substrate-binding protein gene	Microbial Virulence	DMA00611	Yes
endopeptidase Clp ATP-binding chain C	Bacterial ATP-dependent Clp protease ATP-binding subunit gene	Microbial Virulence	DMA00606	No
Enterotoxigenic Ecoli, LT	E. coli heat-labile enterotoxin LT subunit B gene	Microbial Virulence	DMA00612	No
Enterotoxigenic Ecoli, ST	E. coli heat-stable toxin I (estA1) gene	Microbial Virulence	DMA00613	No
enterotoxin	Bacterial enterotoxin ystA gene	Microbial Virulence	DMA00692	No
flagellar basal-body rod protein (flgG)	Bacterial flagellar hook protein FlgE gene	Microbial Virulence	DMA00617	No
flagellar biosynthesis protein	Bacterial flagellar biosynthesis protein FlhA gene	Microbial Virulence	DMA00619	No
flagellar hook-associated protein 1 FlgK	Bacterial flagellar hook-associated protein FlgK gene	Microbial Virulence	DMA00618	No
flagellar M-ring protein	Bacterial flagellar M-ring protein FliF gene	Microbial Virulence	DMA00622	No
flagellar motor switch protein FliG	Bacterial flagellar motor switch protein FliG gene	Microbial Virulence	DMA00623	No
flagellar motor switch protein FliN	Bacterial flagellar motor switch protein FliN gene	Microbial Virulence	DMA00624	No
flagellar synthesis regulator FleN	Bacterial flagellar synthesis regulator FleN gene	Microbial Virulence	DMA00616	No
flagellin	Bacterial flagellin fliC2 gene	Microbial Virulence	DMA00621	No
flagellin B (flaB)	Bacterial flagellin B gene	Microbial Virulence	DMA00615	No
gamma-hemolysin component B	Bacterial gamma-hemolysin component B (hlgB) gene	Microbial Virulence	DMA00635	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
gamma-hemolysin component C	Bacterial bi-component gamma-hemolysin HlgCB subunit C gene	Microbial Virulence	DMA00636	No
glycosyltransferase	Bacterial glycosyltransferase family 4 protein gene	Microbial Virulence	DMA00688	Yes
H.pylori Virulence Factor babB	Bacterial adhesin-binding fucosylated histo-blood group antigen babB gene	Microbial Virulence	DMA00625	No
H.pylori Virulence Factor cagA	Bacterial cytotoxin-associated protein A (cagA) gene	Microbial Virulence	DMA00626	No
H.pylori Virulence Factor dupA	Bacterial duodenal ulcer-promoting protein dupA gene	Microbial Virulence	DMA00627	No
H.pylori Virulence Factor iceA	Bacterial ulcer-associated restriction endonuclease protein iceA gene	Microbial Virulence	DMA00628	No
H.pylori Virulence Factor vacA	Bacterial autotransporter vacuolating cytotoxin VacA gene	Microbial Virulence	DMA00629	Yes
H.pylori Virulence Factor virB	Bacterial P-type DNA transfer ATPase VirB11 gene	Microbial Virulence	DMA00630	No
H.pylori Virulence Factor virD	Bacterial sodium-calcium antiporter virD gene	Microbial Virulence	DMA00631	No
htpB	Bacterial molecular chaperone GroEL (htpB) gene	Microbial Virulence	DMA00637	No
IcmK (DotH)	Bacterial intracellular multiplication protein (IcmK) gene	Microbial Virulence	DMA00639	No
Immunoglobulin G binding protein A precursor	Bacterial staphylococcal protein A spa gene	Microbial Virulence	DMA00671	No
In vitro mammalian cells invasion	Bacterial invasins Inv gene	Microbial Virulence	DMA00641	No
Internalin A	Bacterial internalin A gene	Microbial Virulence	DMA00640	No
intimin adherence protein	Bacterial intimin type gamma protein gene	Microbial Virulence	DMA00610	No
invasion protein	Bacterial type III secretion system export apparatus protein InvA gene	Microbial Virulence	DMA00642	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
ipaH	Bacterial invasion plasmid antigen ipaH gene	Microbial Virulence	DMA00643	No
IucA	Bacterial aerobactin siderophore biosynthesis protein iucA gene	Microbial Virulence	DMA00644	No
IucB	Bacterial aerobactin siderophore biosynthesis protein iucB gene	Microbial Virulence	DMA00645	No
IucC	Bacterial aerobactin synthase iucC gene	Microbial Virulence	DMA00646	No
IucD	Bacterial L-lysine N6-monooxygenase iucD gene	Microbial Virulence	DMA00647	No
IutA	Bacterial ferric aerobactin receptor iutA gene	Microbial Virulence	DMA00648	No
lactoferrin-binding protein A	Bacterial lactoferrin/transferrin family TonB-dependent receptor gene	Microbial Virulence	DMA00650	No
LepA, interaptin	Bacterial interaptin lepA gene	Microbial Virulence	DMA00651	No
mbtA	Bacterial bifunctional salicyl-AMP ligase/salicyl-S-ArCP synthetase mbtA gene	Microbial Virulence	DMA00654	No
mbtD	Bacterial mycobactin polyketide synthase MbtD gene	Microbial Virulence	DMA00655	No
mbtE	Bacterial non-ribosomal peptide synthetase mbtE gene	Microbial Virulence	DMA00656	No
minor fimbrial subunit	Bacterial type 1 fimbrin D-mannose specific adhesin FimH gene	Microbial Virulence	DMA00614	Yes
O-antigen export system ATP-binding protein	Bacterial ABC transporter ATP-binding protein gene	Microbial Virulence	DMA00689	No
outer membrane protein	Bacterial outer inflammatory protein OipA gene	Microbial Virulence	DMA00658	No
outer membrane usher protein PsaC precursor	Bacterial fimbrial biogenesis usher protein PsaC gene	Microbial Virulence	DMA00667	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
P60 extracellular protein, invasion associated protein iap	Bacterial invasion associated endopeptidase (iap) gene	Microbial Virulence	DMA00638	No
Panton-Valentine leukocidin chain F precursor	Bacterial Panton-Valentine bi-component leukocidin subunit F gene	Microbial Virulence	DMA00652	No
pertussis toxin subunit 1 precursor	Bacterial pertussis toxin ADP-ribosyltransferase subunit PtxA gene	Microbial Virulence	DMA00668	Yes
pH 6 antigen precursor (antigen 4) (adhesin)	Bacterial adhesin PsaA gene	Microbial Virulence	DMA00665	No
phosphatidylinositol-specific phospholipase c	Bacterial 1-phosphatidylinositol phosphodiesterase gene	Microbial Virulence	DMA00663	No
Photorhabdus insect-related toxin-like	Bacterial toxin pirA/pirB gene	Microbial Virulence	DMA00661	No
pilus assembly protein PilG	Bacterial pilus assembly protein PilG gene	Microbial Virulence	DMA00660	No
pneumolysin	Bacterial pneumolysin (ply) gene	Microbial Virulence	DMA00664	Yes
polysaccharide biosynthesis protein CpsL	Bacterial capsular polysaccharide repeat unit transporter cpsL gene	Microbial Virulence	DMA00607	No
putative arylsulfatase	Bacterial arylsulfatase asIA gene	Microbial Virulence	DMA00599	No
Putative heme/hemoglobin transport protein	Bacterial hematinate-forming heme oxygenase ChuS gene	Microbial Virulence	DMA00603	No
putative lipopolysaccharide heptosyltransferase	Bacterial lipopolysaccharide heptosyltransferase I waaC gene	Microbial Virulence	DMA00687	No
Putative surface anchored protein	Bacterial carboxypeptidase regulatory-like domain-containing protein gene	Microbial Virulence	DMA00673	No
Putative surface-anchored fimbrial subunit	Bacterial isopeptide-forming domain-containing fimbrial protein gene	Microbial Virulence	DMA00672	No
pyrogenic exotoxin B	Bacterial cysteine proteinase exotoxin SpeB gene	Microbial Virulence	DMA00676	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
response regulator in two-component regulatory system with PhoQ, transcribes genes expressed under low Mg <sup>+</sup> concentration (OmpR family)	Bacterial two-component system response regulator PhoP gene	Microbial Virulence	DMA00659	No
RNA polymerase sigma factor for flagellar operon	Bacterial flagellar biosynthesis sigma factor fliA gene	Microbial Virulence	DMA00620	No
rpoS	Bacterial serine/threonine protein kinase gene	Microbial Virulence	DMA00669	No
S/T Protein Kinase	Clamidia serine/threonine protein kinase gene	Microbial Virulence	DMA00662	No
secretory proteins, surface presentation of antigens	Bacterial SPI-1 type III secretion system protein SpaO gene	Microbial Virulence	DMA00674	No
secretory proteins, surface presentation of antigens	Bacterial SPI-1 type III secretion system export apparatus protein SpaP gene	Microbial Virulence	DMA00675	No
Shiga toxin subunit A, RNA-N-glycosidase, catalytic subunit	Bacterial shiga toxin Stx1 subunit A gene	Microbial Virulence	DMA00679	Yes
Shiga toxin subunit B, receptor binding subunit	Bacterial shiga toxin Stx1a subunit B gene	Microbial Virulence	DMA00680	Yes
shiga-like toxin 1 subunit B encoded within prophage CP-933V	Bacterial shiga toxin Stx1a subunit B gene	Microbial Virulence	DMA00677	Yes
shiga-like toxin II A subunit encoded by bacteriophage BP-933W	Bacterial shiga toxin Stx2c subunit A gene	Microbial Virulence	DMA00678	Yes
sigma-54 dependent transcriptional regulator	Bacterial sigma-54 dependent transcriptional regulator VasH gene	Microbial Virulence	DMA00686	No
streptolysin O precursor	Bacterial cholesterol-dependent cytolysin streptolysin O slo gene	Microbial Virulence	DMA00670	No
Surface protein/Bartonella adhesin	Bacterial trimeric autotransporter adhesin BapA gene	Microbial Virulence	DMA00600	No
thermoregulated motility protein	Bacterial flagellin A gene	Microbial Virulence	DMA00691	No
toxin A	Bacterial toxin A (tcdA) gene	Microbial Virulence	DMA00682	No



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
toxin B	Bacterial glycosylating toxin TcdB gene	Microbial Virulence	DMA00683	No
transferrin-binding protein 1 precursor	Bacterial lactoferrin/transferrin family TonB-dependent receptor gene	Microbial Virulence	DMA00681	No
TssH	Bacterial type VI secretion system ATPase TssH gene	Microbial Virulence	DMA00605	No
type III translocated protein	Bacterial translocated actin-recruiting phosphoprotein gene	Microbial Virulence	DMA00608	No
UDP-N-acetylglucosamine-2-epimerase NeuC	Bacterial UDP-N-acetylglucosamine 2-epimerase neuC gene	Microbial Virulence	DMA00657	No
urease accessory protein (ureI)	Bacterial acid-activated urea channel ureI gene	Microbial Virulence	DMA00685	No
urease alpha subunit (ureA) (urea amidohydrolase)	Bacterial urease subunit alpha ureA gene	Microbial Virulence	DMA00684	No
yersiniabactin biosynthetic protein YbfT	Bacterial yersiniabactin biosynthesis thioesterase YbfT gene	Microbial Virulence	DMA00690	No
zona occludens toxin	Bacterial zonula occludens toxin ZOT gene	Microbial Virulence	DMA00693	No

#### dPCR Microbial DNA Detection Assay list for Virulence Genes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
aggR	aggR	Microbial Virulence, Foodborne Pathogens, Gastrointestinal Infections, Human Pathogens, Infectious Diseases	DMA00960	Yes

#### dPCR Microbial DNA Detection Assay list for Viruses

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
African swine fever virus (10497)		Animal Disease	DMA00716	Yes
Alphapapillomavirus 10 (333754)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00880	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Autographa californica multiple nucleopolyhedrovirus (307456)	Ac-bro baculovirus repeated ORF	Adventitious Agents	DMA00919	Yes
Avian orthoreovirus (38170)	MuA (M1) gene	Animal Disease	DMA00876	Yes
Avian orthoreovirus (38170)	MuA (M1) gene	Animal Disease	DMA00877	Yes
Baculovirus penaei (384357)	Predicted polyhedrin gene	Food Production	DMA00424	No
Betapolyomavirus hominis (1891762)		Human Pathogens, Transplantation	DMA00894	Yes
Betapolyomavirus macacae (1891767)	large T Antigene; HEK293T	Adventitious Agents	DMA00936	Yes
Betapolyomavirus secuhominis (1891763)	Late mRNA gene	Human Pathogens	DMA00861	Yes
Bluetongue virus (40051)	RNA-dependent RNA polymerase	Animal Disease	DMA00974	Yes
Bocaparvovirus (1507401)	Nonstructural protein NS1 gene	Infectious Diseases	DMA00456	No
Bourbon virus (1618189)		Tropical & Vector-borne Diseases	DMA00789	Yes
Bovine polyomavirus 1 (1561702)	VP2	Adventitious Agents, Animal Disease	DMA00946	Yes
Bovine polyomavirus 2 (1578134)	RF32_gp1	Adventitious Agents, Animal Disease	DMA00950	Yes
Bovine polyomavirus 2a (1561703)	VP2	Adventitious Agents, Animal Disease	DMA00947	Yes
Bovine polyomavirus 2b (1561704)	VP1	Adventitious Agents, Animal Disease	DMA00948	Yes
Bovine polyomavirus 3 (1561705)	gp3	Adventitious Agents, Animal Disease	DMA00949	Yes
Bovine viral diarrhea virus 1 (11099)	polyprotein	Animal Disease, Adventitious Agents	DMA00973	Yes
Cauliflower mosaic virus (10641)		Food Production	DMA00814	Yes
Chikungunya virus (37124)		Wastewater & Drinking Water Epidemiology	DMA00748	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Cucumber mosaic virus (12305)	Capsid protein (CP) gene	Food Testing	DMA00865	Yes
Decapod penstyldensovirus 1 (1513224)	Non-structural protein 2 (NS2) gene	Food Production	DMA00420	No
Dengue virus (12637)	POLY	Tropical & Vector-borne Diseases	DMA00788	Yes
dengue virus type 1 (11053)		Tropical & Vector-borne Diseases	DMA00731	Yes
dengue virus type 2 (11060)		Tropical & Vector-borne Diseases	DMA00732	Yes
dengue virus type 3 (11069)		Tropical & Vector-borne Diseases	DMA00733	Yes
dengue virus type 4 (11070)		Tropical & Vector-borne Diseases	DMA00734	Yes
Eastern equine encephalitis virus (11021)	gp3	Animal Disease	DMA00754	Yes
Ebola virus (1570291)		Tropical & Vector-borne Diseases	DMA00815	Yes
Encephalomyocarditis virus (12104)	EMCVgp2	Animal Disease, Adventitious Agents	DMA00927	Yes
Enterovirus (12059)	Polyprotein gene	Human Pathogens, Infectious Diseases	DMA00487	Yes
Enterovirus E (12064)	5'UTR	Human Pathogens	DMA00896	Yes
Foot-and-mouth disease virus (12110)	upstream of D1Y31_gp1	Animal Disease	DMA00925	Yes
Gill-associated virus genotype 2 (557593)	Polyprotein pp1ab gene	Food Production	DMA00418	No
H-1 parvovirus (10799)	major capsid protein	Adventitious Agents	DMA00981	Yes
H5N1 subtype (102793)	H5	Human Pathogens, Infectious Diseases	DMA00892	Yes
H5N1 subtype (102793)	H5	Human Pathogens, Infectious Diseases	DMA00893	Yes
Heartland virus (1216928)		Tropical & Vector-borne Diseases	DMA00790	Yes
Henipavirus nipahense (3052225)	NP nucleocapsid protein gene	Human Pathogens, Infectious Diseases, Animal	DMA00930	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
		Disease, Tropical & Vector-borne Diseases		
Hepacivirus hominis (3052230)		Human Pathogens	DMA00809	Yes
Hepatitis B virus (10407)		Human Pathogens	DMA00808	Yes
Hepatitis delta virus (12475)		Human Pathogens	DMA00810	Yes
Hepatitis E virus (291484)		Wastewater & Drinking Water Epidemiology	DMA00750	Yes
Human adenovirus 40 (28284)	fiber-1	Gastrointestinal Infections, Infectious Diseases, Human Pathogens, Wastewater & Drinking Water Epidemiology, Food Testing	DMA00983	Yes
Human adenovirus 5 (28285)		Adventitious Agents	DMA00907	Yes
Human adenovirus 5 (28285)	Early region E1A-CR2-del	Adventitious Agents	DMA00923	Yes
Human adenovirus 5 (28285)	Early region E1A	Adventitious Agents	DMA00938	Yes
Human alphaherpesvirus 1 (10298)	Glycoprotein I gene	Human Pathogens	DMA00395	No
Human alphaherpesvirus 1 (10298), Human alphaherpesvirus 1 strain 17 (10299)	US4	Sexually Transmitted Infections (STI)	DMA00724	Yes
Human alphaherpesvirus 1 (10298), Human alphaherpesvirus 1 strain 17 (10299), Human alphaherpesvirus 2 (10310)	UL30	Sexually Transmitted Infections (STI)	DMA00726	Yes
Human alphaherpesvirus 2 (10310)	Glycoprotein G gene	Human Pathogens	DMA00396	No
Human alphaherpesvirus 2 (10310), Human herpesvirus 2 strain HG52 (10315)	US56	Sexually Transmitted Infections (STI)	DMA00725	Yes
Human alphaherpesvirus 3 (10335)	Glycoprotein H gene	Human Pathogens	DMA00397	No
Human alphaherpesvirus 3 (10335)	ORF38		DMA00728	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Human astrovirus 1 (12456)	ORF1b polyprotein gene	Human Pathogens, Infectious Diseases	DMA00485	No
Human betaherpesvirus 5 (10359)	UL54	Herpes Panel	DMA00835	Yes
Human betaherpesvirus 6A (32603)	U90	Herpes Panel	DMA00837	Yes
Human betaherpesvirus 6B (32604)	U90	Herpes Panel	DMA00838	Yes
Human betaherpesvirus 7 (10372)	U57	Herpes Panel	DMA00839	Yes
Human coronavirus 229E (11137)	Spike glycoprotein (S) gene	Human Pathogens	DMA00430	No
Human coronavirus HKU1 (290028)	Spike glycoprotein gene	Human Pathogens	DMA00452	No
Human coronavirus NL63 (277944)	Membrane Protein gene	Human Pathogens	DMA00453	No
Human coronavirus OC43 (31631)	Replicase polyprotein 1ab gene	Human Pathogens	DMA00431	No
human gammaherpesvirus 4 (10376)	IR1	Herpes Panel	DMA00840	Yes
Human gammaherpesvirus 8 (37296)	ORF9	Herpes Panel	DMA00836	Yes
Human hepatitis A virus (208726)		Human Pathogens	DMA00807	Yes
Human immunodeficiency virus (12721)		Human Pathogens	DMA00811	Yes
Human immunodeficiency virus 1 (11676)	pol	Sexually Transmitted Infections (STI), Infectious Diseases, Human Pathogens	DMA00967	Yes
human metapneumovirus (162145)	Fusion protein (F) gene	Human Pathogens, Infectious Diseases	DMA00372	Yes
Human orthorubulavirus 2 (2560525)	Hemagglutinin-neuraminidase (HN) gene	Human Pathogens, Infectious Diseases	DMA00376	Yes
Human orthorubulavirus 4 (2560526)	Nonstructural protein V gene	Human Pathogens	DMA00454	Yes
Human papillomavirus (10566)	L1	Adventitious Agents, Sexually Transmitted Infections (STI), Human Pathogens, Infectious Diseases, Positive Control Assay	DMA00999	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
human papillomavirus 11 (10580)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00881	Yes
Human papillomavirus 16 (333760)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00882	Yes
human papillomavirus 18 (333761)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00883	Yes
human papillomavirus 18 (333761)	E6	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00937	Yes
human papillomavirus 31 (10585)	E6	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00932	Yes
human papillomavirus 33 (10586)	E6	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00933	Yes
human papillomavirus 35 (10587)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00887	Yes
human papillomavirus 39 (10588)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00908	Yes
human papillomavirus 45 (10593)	E6	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00934	Yes
human papillomavirus 51 (10595)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00888	Yes
human papillomavirus 52 (10618)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00884	Yes
human papillomavirus 56 (10596)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00889	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
human papillomavirus 58 (10598)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00885	Yes
human papillomavirus 59 (37115)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00890	Yes
human papillomavirus 66 (37119)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00886	Yes
human papillomavirus 68 (45240)	E6	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00935	Yes
human papillomavirus 73 (51033)	L1	Human Pathogens, Infectious Diseases, Sexually Transmitted Infections (STI)	DMA00891	Yes
Human parvovirus B19 (10798)	Non-structural protein (NS1) gene	Human Pathogens	DMA00862	Yes
Human respiratory syncytial virus A (208893)	pol (L)	Infectious Diseases, Human Pathogens, Wastewater & Drinking Water Epidemiology	DMA00979	Yes
Human respiratory syncytial virus B (208895)	pol (L)	Infectious Diseases, Human Pathogens, Wastewater & Drinking Water Epidemiology	DMA00980	Yes
Human respirovirus 1 (12730)	Hemagglutinin-neuraminidase (HN) gene	Human Pathogens, Infectious Diseases	DMA00375	Yes
Human respirovirus 3 (11216)	Hemagglutinin-neuraminidase (HN) gene	Human Pathogens, Infectious Diseases	DMA00377	Yes
Human rhinovirus sp. (169066)	Polyprotein gene	Human Pathogens, Infectious Diseases	DMA00378	No
Human rotavirus A (10941)	Protease-sensitive protein (VP4) gene	Infectious Diseases	DMA00488	Yes
Human T-cell leukemia virus type I (11908)	Pol polyprotein (pol) gene	Human Pathogens	DMA00867	Yes
Human T-cell leukemia virus type I (11908)	Protein Tax (tax) gene	Human Pathogens	DMA00869	Yes
Human T-lymphotropic virus 2 (11909)	Pol polyprotein (pol) gene	Human Pathogens	DMA00868	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Human T-lymphotropic virus 2 (11909)	Protein Tax (tax) gene	Human Pathogens	DMA00870	Yes
Influenza A virus (11320)	Segment 7 matrix protein gene	Human Pathogens, Infectious Diseases	DMA00373	Yes
Influenza A virus (11320)	Matrix protein 1 gene (M1)	Human Pathogens	DMA00712	No
Influenza A virus (11320)	Matrix protein 1 gene (M1)	Human Pathogens	DMA00713	No
Influenza A virus (11320)	Matrix protein (M) gene	Human Pathogens	DMA00855	Yes
Influenza A virus (11320)	H5 incl. clade 1 and clade 2.3.4.4b	Human Pathogens	DMA00858	Yes
Influenza A virus (11320)	H5 incl. clade 1 and clade 2.3.4.4b	Human Pathogens	DMA00859	Yes
Influenza B virus (11520)	Segment 8 nuclear export protein (NEP) gene	Human Pathogens, Infectious Diseases	DMA00374	Yes
Influenza B virus (11520)	Nuclear export protein gene (NEP)	Human Pathogens	DMA00714	No
Influenza B virus (11520)	Hemagglutinin (HA) gene	Human Pathogens	DMA00856	Yes
Influenza C virus (11552)	NP nucleoprotein gene	Human Pathogens, Infectious Diseases	DMA00857	Yes
Japanese encephalitis virus (11072)	NS1	Tropical & Vector-borne Diseases	DMA00757	Yes
Kilham rat virus (12441)	VP1	Adventitious Agents, Animal Disease, Positive Control Assay	DMA00968	Yes
Lactate dehydrogenase-elevating virus (11048)	ORF1aTF	Adventitious Agents, Animal Disease	DMA00940	Yes
Laem Singh virus (691504)	RNA-dependent RNA polymerase (RdRP) gene	Food Production	DMA00422	No
Lyssavirus rabies (11292)		Animal Disease	DMA00816	Yes
Mammalian orthoreovirus 3 (538123)	M3	Adventitious Agents, Animal Disease	DMA00995	Yes
Mammalian orthorubulavirus 5 (2560580)	nucleocapsid protein NP	Adventitious Agents, Infectious Diseases, Human Pathogens, Animal Disease	DMA00952	Yes



Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Mammarenavirus choriomeningitidis (3052303)	L protein	Adventitious Agents, Animal Disease, Infectious Diseases,	DMA00941	Yes
Mammarenavirus lassaense (3052310)	GPC glycoprotein precursor	Human Pathogens, Infectious Diseases, Tropical & Vector-borne Diseases	DMA00931	Yes
Mayaro virus (59301)	Nonstructural protein 1 gene	Infectious Diseases	DMA00457	No
Measles morbillivirus (11234)		Human Pathogens	DMA00786	Yes
Measles morbillivirus (11234)	large polymerase protein	Infectious Diseases, Human Pathogens, Wastewater & Drinking Water Epidemiology	DMA00997	Yes
Middle East respiratory syndrome-related coronavirus (1335626)	upstream of Envelope glycoprotein (env) gene	Human Pathogens	DMA00844	Yes
Minute virus of mice (10794)	NS1	Adventitious Agents, Positive Control Assay	DMA00942	Yes
Monkeypox virus (10244)		Wastewater & Drinking Water Epidemiology	DMA00746	Yes
Monkeypox virus (10244)		Wastewater & Drinking Water Epidemiology	DMA00747	Yes
Monkeypox virus (10244)		Tropical & Vector-borne Diseases	DMA00770	Yes
Monkeypox virus (10244)		Human Pathogens	DMA00852	Yes
Monkeypox virus (10244)	upstream of C4L/C10L-like family protein gene	Human Pathogens	DMA00853	Yes
Mourilyan virus (325212)	G1-G2 glycoprotein precursor gene	Food Production	DMA00423	No
Mumps orthorubulavirus (2560602)		Human Pathogens	DMA00787	Yes
Murid betaherpesvirus 1 (10366)	lower matrix phosphoprotein	Adventitious Agents	DMA00984	Yes
Murid herpesvirus 3 (2419785)	ORF12	Adventitious Agents, Animal Disease	DMA00972	Yes
Murine adenovirus 2 (931972)	E1A	Adventitious Agents, Animal Disease	DMA00943	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Murine adenovirus 3 (573199)		Adventitious Agents	DMA00985	Yes
Murine hepatitis virus (11138)	ORF1ab	Adventitious Agents, Animal Disease	DMA00944	Yes
Murine mastadenovirus A (129956)	precursor to X (mu) polypeptide	Adventitious Agents, Animal Disease	DMA00969	Yes
murine pneumonia virus (11263)	nonstructural protein 1	Adventitious Agents, Animal Disease	DMA00945	Yes
Murine rotavirus (28327)	VP4	Adventitious Agents, Animal Disease	DMA00971	Yes
Norovirus GI (122928)	RNA-dependent RNA polymerase gene	Human Pathogens	DMA00472	Yes
Norovirus GII (122929)	Nonstructural protein gene	Human Pathogens	DMA00473	Yes
Oropouche virus (118655)	RNA-dependent RNA polymerase gene	Human Pathogens, Infectious Diseases	DMA00459	No
Orthobunyavirus oropoucheense (3052429)	NP nucleoprotein gene	Human Pathogens, Infectious Diseases, Tropical & Vector-borne Diseases, Tropical & Vector-borne Diseases	DMA00897	Yes
Orthohantavirus hantanense (3052480)	putative polymerase	Adventitious Agents, Infectious Diseases, Animal Disease	DMA00939	Yes
Orthomarburgvirus marburgense (3052505)		Human Pathogens	DMA00874	Yes
Orthomarburgvirus marburgense (3052505)		Human Pathogens	DMA00875	Yes
Orthospovirus tomatomaculae (3052585)	Segment S gene	Food Testing	DMA00863	Yes
Parietaria mottle virus (64958)	3'UTR	Plant Pathogens / Food Spoilage, Food Production	DMA00909	Yes
Penaeid shrimp infectious myonecrosis virus (282786)	Capsid protein gene	Food Production	DMA00421	No
Penaeus merguensis densovirus (139034)	Structural protein VP1 gene	Food Production	DMA00419	No
Pepper mild mottle virus (12239)	Pepper mild mottle virus used as an fecal indicator for RNA targets	Positive Control Assay	DMA00722	Yes
Porcine circovirus 1 (133704)	V1 replication associated protein	Adventitious Agents, Animal Disease	DMA00986	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Porcine circovirus 2 (85708)	replicase protein gene	Animal Disease, Adventitious Agents	DMA00904	Yes
Porcine parvovirus (10796)	PT4 gene	Animal Disease, Adventitious Agents	DMA00915	Yes
Potato leafroll virus (12045)	coat protein gene	Food Testing	DMA00871	Yes
Potato virus S (12169)	coat protein gene	Food Testing	DMA00872	Yes
Potato virus X (12183)	coat protein gene	Food Testing	DMA00873	Yes
Potato virus Y (12216)	Capsid protein (CP) gene	Food Testing	DMA00866	Yes
Rat coronavirus (31632)	ORF1ab	Adventitious Agents, Animal Disease	DMA00953	Yes
Rat sialodacryoadenitis coronavirus (92931)	spike protein S	Adventitious Agents, Animal Disease	DMA00966	Yes
Respiratory syncytial virus (12814)	Matrix protein gene	Human Pathogens, Infectious Diseases	DMA00379	Yes
Respiratory syncytial virus (12814)	Matrix protein gene (M)	Human Pathogens	DMA00715	No
Respirovirus muris (3052731)	nucleoprotein NP	Adventitious Agents, Animal Disease	DMA00951	Yes
Rift Valley fever virus (11588)		Animal Disease	DMA00817	Yes
Sapovirus GI (515176)		Human Pathogens	DMA00782	Yes
Sapovirus GII (515177)		Human Pathogens	DMA00783	Yes
Sapovirus GIV (515179)		Human Pathogens	DMA00784	Yes
Sapovirus GVI (1471435)		Human Pathogens	DMA00785	Yes
Sapovirus sp. (1906670)	Polyprotein gene	Human Pathogens, Infectious Diseases	DMA00486	No
Severe acute respiratory syndrome coronavirus 2 (2697049)	Conserved region 1 (N1) ribonucleoprotein gene	Human Pathogens	DMA00710	No
Severe acute respiratory syndrome coronavirus 2 (2697049)	Conserved region 2 (N2) ribonucleoprotein gene	Human Pathogens	DMA00711	No

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
Severe acute respiratory syndrome-related coronavirus (694009)	ORF1b	Human Pathogens	DMA00845	Yes
Simian T-lymphotropic virus 1 (33747)		Animal Disease	DMA00898	Yes
Sindbis virus (11034)	nonstructural polyprotein	Human Pathogens, Tropical & Vector-borne Diseases, Tropical & Vector-borne Diseases, Adventitious Agents	DMA00917	Yes
Spawner-isolated mortality virus (207679)	Viral genomic DNA	Food Production	DMA00425	No
St. Louis encephalitis virus (11080)		Tropical & Vector-borne Diseases	DMA00818	Yes
Suid alphaherpesvirus 1 (10345)		Animal Disease, Adventitious Agents	DMA00906	Yes
Suid alphaherpesvirus 1 (10345)	gB	Animal Disease	DMA00926	Yes
Taura syndrome virus (142102)	Capsid protein gene	Food Production	DMA00426	No
Theiler's encephalomyelitis virus (12124)	2B*	Adventitious Agents, Animal Disease	DMA00970	Yes
Tobacco mosaic virus (12242)	Replicase gene	Food Testing	DMA00860	Yes
Tomato yellow leaf curl virus (10832)	OFF C1 gene	Food Testing	DMA00864	Yes
Transmissible gastroenteritis virus (11149)		Animal Disease, Adventitious Agents	DMA00905	Yes
unidentified adenovirus (10535)	Capsid protein II gene	Infectious Diseases	DMA00371	Yes
Venezuelan equine encephalitis virus (11036)		Animal Disease	DMA00756	Yes
Vesicular stomatitis virus (11276)	M gene	Animal Disease, Adventitious Agents	DMA00916	Yes
Vesivirus (95337)	nonstructural polyprotein	Animal Disease, Adventitious Agents	DMA00918	Yes
West Nile virus (11082)	Polyprotein gene	Human Pathogens	DMA00455	No
Western equine encephalitis virus (11039)	gp2	Animal Disease	DMA00755	Yes

Target Species	Target Region	Application Field	GeneGlobe ID	Wet-lab Verified
White spot syndrome virus (342409)	Capsid protein gene	Food Production	DMA00427	No
Yellow fever virus (11089)	Polyprotein gene	Human Pathogens, Infectious Diseases	DMA00458	No
Yellow head virus (96029)	Replicase polyprotein lab gene	Food Production	DMA00428	No
Yellow head virus (96029)	Replicase polyprotein lab gene	Food Production	DMA00429	No
Zika virus (64320)		Tropical & Vector-borne Diseases	DMA00841	Yes

### Bundles list

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial Adventitious Agents Human Virus DNA	Human betaherpesvirus 6A (32603)	DMA00837-F	FAM
dPCR Microbial Adventitious Agents Human Virus DNA	Human betaherpesvirus 6B (32604)	DMA00838-F	FAM
dPCR Microbial Adventitious Agents Human Virus DNA	Hepatitis B virus (10407)	DMA00808-H	HEX
dPCR Microbial Adventitious Agents Human Virus DNA	Human parvovirus B19 (10798)	DMA00862-H	HEX
dPCR Microbial Adventitious Agents Human Virus DNA	Betapolyomavirus macacae (1891767)	DMA00936-T	TAMRA
dPCR Microbial Adventitious Agents Human Virus DNA	Human betaherpesvirus 7 (10372)	DMA00839-R	ROX
dPCR Microbial Adventitious Agents Human Virus DNA	Human gammaherpesvirus 8 (37296)	DMA00836-R	ROX
dPCR Microbial Adventitious Agents Human Virus DNA	human gammaherpesvirus 4 (10376)	DMA00840-C	Cy5
dPCR Microbial Adventitious Agents Human Virus DNA	Human betaherpesvirus 5 (10359)	DMA00835-S	ATTO700
dPCR Microbial Adventitious Agents Human Virus RNA	Hepacivirus hominis (3052230)	DMA00809-F	FAM
dPCR Microbial Adventitious Agents Human Virus RNA	Human hepatitis A virus (208726)	DMA00807-H	HEX
dPCR Microbial Adventitious Agents Human Virus RNA	Human T-cell leukemia virus type I (11908)	DMA00867-T	TAMRA

<b>Bundle Name</b>	<b>Target Name</b>	<b>GeneGlobe ID</b>	<b>Dye</b>
dPCR Microbial Adventitious Agents Human Virus RNA	Human T-lymphotropic virus 2 (11909)	DMA00870-R	ROX
dPCR Microbial Adventitious Agents Human Virus RNA	Homo sapiens (9606)	DMA00720-S	ATTO700
dPCR Microbial DNA Detection Cannabis Production 1 Research	Pseudomonas aeruginosa (287)	DMA00278-F	FAM
dPCR Microbial DNA Detection Cannabis Production 1 Research	Staphylococcus aureus (1280)	DMA00302-H	HEX
dPCR Microbial DNA Detection Cannabis Production 1 Research	Aspergillus niger (5061)	DMA00365-R	ROX
dPCR Microbial DNA Detection Cannabis Production 1 Research	Listeria monocytogenes (1639)	DMA00199-C	Cy5
dPCR Microbial DNA Detection Cannabis Production 2 Research	Mucor hiemalis (64493)	DMA00368-F	FAM
dPCR Microbial DNA Detection Cannabis Production 2 Research	Aspergillus fumigatus (746128)	DMA00036-H	HEX
dPCR Microbial DNA Detection Cannabis Production 2 Research	Aspergillus niger (5061)	DMA00365-R	ROX
dPCR Microbial DNA Detection Cannabis Production 2 Research	Listeria monocytogenes (1639)	DMA00199-C	Cy5
dPCR Microbial DNA Detection Gastrointestinal Pathogens 1 Research	Campylobacter upsaliensis (28080)	DMA00088-F	FAM
dPCR Microbial DNA Detection Gastrointestinal Pathogens 1 Research	Clostridioides difficile (1496)	DMA00107-H	HEX
dPCR Microbial DNA Detection Gastrointestinal Pathogens 1 Research	Entamoeba histolytica (5759)	DMA00358-T	TAMRA
dPCR Microbial DNA Detection Gastrointestinal Pathogens 1 Research	Clostridium sp. SS2/1 (411484)	DMA00113-R	ROX
dPCR Microbial DNA Detection Gastrointestinal Pathogens 1 Research	Clostridium tetani (1513)	DMA00114-C	Cy5
dPCR Microbial DNA Detection Gastrointestinal Pathogens 2 Research	Campylobacter (194)	DMA00355-F	FAM
dPCR Microbial DNA Detection Gastrointestinal Pathogens 2 Research	Cryptosporidium hominis (237895)	DMA00356-H	HEX

<b>Bundle Name</b>	<b>Target Name</b>	<b>GeneGlobe ID</b>	<b>Dye</b>
dPCR Microbial DNA Detection Gastrointestinal Pathogens 2 Research	Campylobacter concisus (199)	DMA00081-T	TAMRA
dPCR Microbial DNA Detection Gastrointestinal Pathogens 2 Research	Giardia intestinalis (5741)	DMA00359-R	ROX
dPCR Microbial DNA Detection Gastrointestinal Pathogens 2 Research	Vibrio parahaemolyticus (670)	DMA00341-C	Cy5
dPCR Microbial DNA Detection Gastrointestinal Pathogens 3 Research	Vibrio vulnificus (672)	DMA00342-F	FAM
dPCR Microbial DNA Detection Gastrointestinal Pathogens 3 Research	Plesiomonas shigelloides (703)	DMA00257-H	HEX
dPCR Microbial DNA Detection Gastrointestinal Pathogens 3 Research	Entamoeba histolytica (5759)	DMA00358-T	TAMRA
dPCR Microbial DNA Detection Gastrointestinal Pathogens 3 Research	Entamoeba coli (110766)	DMA00469-R	ROX
dPCR Microbial DNA Detection Gastrointestinal Pathogens 3 Research	Campylobacter sputorum (206)	DMA00087-C	Cy5
dPCR Microbial DNA Detection Hospital Pathogens 1 Research	Fusobacterium necrophorum (859)	DMA00153-F	FAM
dPCR Microbial DNA Detection Hospital Pathogens 1 Research	Fusobacterium nucleatum (851)	DMA00154-H	HEX
dPCR Microbial DNA Detection Hospital Pathogens 1 Research	Fusobacterium periodonticum (860)	DMA00155-R	ROX
dPCR Microbial DNA Detection Hospital Pathogens 1 Research	Fusobacterium varium (856)	DMA00156-C	Cy5
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human betaherpesvirus 5 (10359)	DMA00835-S	ATTO700
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human betaherpesvirus 6A (32603)	DMA00837-F	FAM
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human betaherpesvirus 6B (32604)	DMA00838-F	FAM
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human betaherpesvirus 7 (10372)	DMA00839-R	ROX

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human gammaherpesvirus 8 (37296)	DMA00836-R	ROX
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human alphaherpesvirus 1 strain 17 (10299)	DMA00726-H	HEX
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	Human alphaherpesvirus 3 (10335)	DMA00728-T	TAMRA
dPCR Microbial DNA Detection Human Herpesvirus Screening Research	human gammaherpesvirus 4 (10376)	DMA00840-C	Cy5
dPCR Microbial DNA Detection Human Microbiome 1 Research	Faecalibacterium prausnitzii (853)	DMA00148-F	FAM
dPCR Microbial DNA Detection Human Microbiome 1 Research	Agathobacter rectalis (39491)	DMA00143-T	TAMRA
dPCR Microbial DNA Detection Human Microbiome 1 Research	Akkermansia muciniphila (239935)	DMA00024-R	ROX
dPCR Microbial DNA Detection Human Microbiome 1 Research	Neorickettsia sennetsu (951)	DMA00003-C	Cy5
dPCR Microbial DNA Detection Human Microbiome 1 Research	Finegoldia magna (1260)	DMA00150-H	HEX
dPCR Microbial DNA Detection Human Microbiome 2 Research	Hoylella oralis (28134)	DMA00271-F	FAM
dPCR Microbial DNA Detection Human Microbiome 2 Research	Actinomyces viscosus (1656)	DMA00017-T	TAMRA
dPCR Microbial DNA Detection Human Microbiome 2 Research	Bacteroides fragilis (817)	DMA00049-C	Cy5
dPCR Microbial DNA Detection Human Microbiome 2 Research	[Eubacterium] infirmum (56774)	DMA00142-H	HEX
dPCR Microbial DNA Detection Human Microbiome 2 Research	Streptococcus oralis (1303)	DMA00317-R	ROX
dPCR Microbial DNA Detection Human Microbiome 3 Research	Bacteroides intestinalis (329854)	DMA00050-F	FAM
dPCR Microbial DNA Detection Human Microbiome 3 Research	Bacteroides thetaiotaomicron (818)	DMA00057-H	HEX
dPCR Microbial DNA Detection Human Microbiome 3 Research	Actinomyces viscosus (1656)	DMA00017-T	TAMRA
dPCR Microbial DNA Detection Human Microbiome 3 Research	Lancefieldella rimae (1383)	DMA00038-R	ROX



Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Human Microbiome 3 Research	Neorickettsia sennetsu (951)	DMA00003-C	Cy5
dPCR Microbial DNA Detection Human Microbiome 4 Research	Bifidobacterium longum (216816)	DMA00064-F	FAM
dPCR Microbial DNA Detection Human Microbiome 4 Research	Bifidobacterium pseudocatenulatum (28026)	DMA00065-H	HEX
dPCR Microbial DNA Detection Human Microbiome 4 Research	Agathobacter rectalis (39491)	DMA00143-T	TAMRA
dPCR Microbial DNA Detection Human Microbiome 4 Research	Bacteroides caccae (47678)	DMA00044-R	ROX
dPCR Microbial DNA Detection Human Microbiome 4 Research	Bifidobacterium dentium (1689)	DMA00063-C	Cy5
dPCR Microbial DNA Detection Human Microbiome 5 Research	Eubacterium ventriosum (39496)	DMA00146-F	FAM
dPCR Microbial DNA Detection Human Microbiome 5 Research	Helicobacter fennelliae (215)	DMA00169-H	HEX
dPCR Microbial DNA Detection Human Microbiome 5 Research	Actinomyces viscosus (1656)	DMA00017-T	TAMRA
dPCR Microbial DNA Detection Human Microbiome 5 Research	Streptococcus oralis (1303)	DMA00317-R	ROX
dPCR Microbial DNA Detection Human Microbiome 5 Research	Finegoldia magna (1260)	DMA00150-C	Cy5
dPCR Microbial DNA Detection Human Pathogens 1 Research	Candida albicans (5476)	DMA00089-F	FAM
dPCR Microbial DNA Detection Human Pathogens 1 Research	Nakaseomyces glabratus (5478)	DMA00090-H	HEX
dPCR Microbial DNA Detection Human Pathogens 1 Research	Moraxella catarrhalis (480)	DMA00213-T	TAMRA
dPCR Microbial DNA Detection Human Pathogens 1 Research	Pichia kudriavzevii (4909)	DMA00091-R	ROX
dPCR Microbial DNA Detection Human Pathogens 1 Research	Candida parapsilosis (5480)	DMA00092-C	Cy5
dPCR Microbial DNA Detection Human Pathogens 2 Research	Candida tropicalis (5482)	DMA00093-F	FAM
dPCR Microbial DNA Detection Human Pathogens 2 Research	Neisseria meningitidis (487)	DMA00231-H	HEX
dPCR Microbial DNA Detection Human Pathogens 2 Research	[Haemophilus] ducreyi (730)	DMA00164-T	TAMRA

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Human Pathogens 2 Research	Corynebacterium pseudodiphtheriticum (37637)	DMA00122-R	ROX
dPCR Microbial DNA Detection Human Pathogens 2 Research	Mycobacterium tuberculosis (1773)	DMA00221-C	Cy5
dPCR Microbial DNA Detection Human Pathogens 3 Research	Bacillus anthracis (1392)	DMA00040-F	FAM
dPCR Microbial DNA Detection Human Pathogens 3 Research	Corynebacterium aurimucosum (169292)	DMA00118-H	HEX
dPCR Microbial DNA Detection Human Pathogens 3 Research	Corynebacterium durum (61592)	DMA00120-T	TAMRA
dPCR Microbial DNA Detection Human Pathogens 3 Research	Corynebacterium diphtheriae (1717)	DMA00119-R	ROX
dPCR Microbial DNA Detection Human Pathogens 3 Research	Candida parapsilosis (5480)	DMA00092-C	Cy5
dPCR Microbial DNA Detection Human Pathogens 4 Research	Bacillus anthracis (1392)	DMA00040-F	FAM
dPCR Microbial DNA Detection Human Pathogens 4 Research	Moraxella lacunata (477)	DMA00214-H	HEX
dPCR Microbial DNA Detection Human Pathogens 4 Research	[Haemophilus] ducreyi (730)	DMA00164-T	TAMRA
dPCR Microbial DNA Detection Human Pathogens 4 Research	Neisseria mucosa (488)	DMA00232-R	ROX
dPCR Microbial DNA Detection Human Pathogens 4 Research	Mycobacterium tuberculosis (1773)	DMA00221-C	Cy5
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Monkeypox virus (10244)	DMA00747-F	FAM
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Monkeypox virus (10244)	DMA00852-H	HEX
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Monkeypox virus (10244)	DMA00746-T	TAMRA
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Monkeypox virus (10244)	DMA00770-R	ROX
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Monkeypox virus (10244)	DMA00853-C	Cy5
dPCR Microbial DNA Detection Monkeypox Clade Typing I Research	Bacteroides (816)	DMA00721-S	ATTO700

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Monkeypox virus (10244)	DMA00747-F	FAM
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Monkeypox virus (10244)	DMA00852-H	HEX
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Monkeypox virus (10244)	DMA00746-T	TAMRA
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Monkeypox virus (10244)	DMA00770-R	ROX
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Monkeypox virus (10244)	DMA00853-C	Cy5
dPCR Microbial DNA Detection Monkeypox Clade Typing II Research	Homo sapiens (9606)	DMA00720-S	ATTO700
dPCR Microbial DNA Detection Probiotics 1 Research	Lactobacillus acidophilus (1579)	DMA00177-F	FAM
dPCR Microbial DNA Detection Probiotics 1 Research	Lactiplantibacillus plantarum (1590)	DMA00185-T	TAMRA
dPCR Microbial DNA Detection Probiotics 1 Research	Bifidobacterium bifidum (1681)	DMA00061-C	Cy5
dPCR Microbial DNA Detection Probiotics 1 Research	Enterococcus faecium (1352)	DMA00137-R	ROX
dPCR Microbial DNA Detection Probiotics 1 Research	Streptococcus salivarius (1304)	DMA00320-H	HEX
dPCR Microbial DNA Detection Resistance Genes 1 Research	Fluoroquinolone resistance	DMA00566-F	FAM
dPCR Microbial DNA Detection Resistance Genes 1 Research	Class D beta-lactamase	DMA00542-H	HEX
dPCR Microbial DNA Detection Resistance Genes 1 Research	VanB	DMA00576-T	TAMRA
dPCR Microbial DNA Detection Resistance Genes 1 Research	Tetracycline efflux pump	DMA00574-R	ROX
dPCR Microbial DNA Detection Resistance Genes 1 Research	Tetracycline efflux pump	DMA00575-C	Cy5
dPCR Microbial DNA Detection Resistance Genes 2 Research	Fluoroquinolone resistance	DMA00557-T	TAMRA
dPCR Microbial DNA Detection Resistance Genes 2 Research	Class B beta-lactamase	DMA00528-R	ROX

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Resistance Genes 2 Research	Class D beta-lactamase	DMA00548-F	FAM
dPCR Microbial DNA Detection Resistance Genes 2 Research	sul1	DMA00587-H	HEX
dPCR Microbial DNA Detection Resistance Genes 2 Research	Class D beta-lactamase	DMA00553-C	Cy5
dPCR Microbial DNA Detection Resistance Genes 3 Research	aac(6)-Ib	DMA00579-F	FAM
dPCR Microbial DNA Detection Resistance Genes 3 Research	VanC	DMA00577-T	TAMRA
dPCR Microbial DNA Detection Resistance Genes 3 Research	Multidrug resistance efflux pump	DMA00573-R	ROX
dPCR Microbial DNA Detection Resistance Genes 3 Research	Class A beta-lactamase	DMA00502-H	HEX
dPCR Microbial DNA Detection Resistance Genes 3 Research	Fluoroquinolone resistance	DMA00559-C	Cy5
dPCR Microbial DNA Detection Resistance Genes 4 Research	Class C beta-lactamase	DMA00531-F	FAM
dPCR Microbial DNA Detection Resistance Genes 4 Research	Class C beta-lactamase	DMA00535-H	HEX
dPCR Microbial DNA Detection Resistance Genes 4 Research	VanC	DMA00577-T	TAMRA
dPCR Microbial DNA Detection Resistance Genes 4 Research	Class C beta-lactamase	DMA00537-R	ROX
dPCR Microbial DNA Detection Resistance Genes 4 Research	Class C beta-lactamase	DMA00538-C	Cy5
dPCR Microbial DNA Detection Resistance Genes 5 Research	Multidrug efflux pump protein OqxA (E. coli, Klebsiella sp., Salomella sp.)	DMA00585-F	FAM
dPCR Microbial DNA Detection Resistance Genes 5 Research	fosA (Klebsiella sp.)	DMA00583-H	HEX
dPCR Microbial DNA Detection Resistance Genes 5 Research	Fluoroquinolone resistance	DMA00557-T	TAMRA
dPCR Microbial DNA Detection Resistance Genes 5 Research	Class D beta-lactamase	DMA00545-R	ROX
dPCR Microbial DNA Detection Resistance Genes 5 Research	Class A beta-lactamase	DMA00508-C	Cy5
dPCR Microbial DNA Detection Sepsis/Multidrug Resistance 1 Research	Streptococcus pneumoniae (1313)	DMA00318-F	FAM

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Sepsis/Multidrug Resistance 1 Research	Streptococcus pyogenes (1314)	DMA00319-H	HEX
dPCR Microbial DNA Detection Sepsis/Multidrug Resistance 1 Research	Acinetobacter calcoaceticus (471)	DMA00005-T	TAMRA
dPCR Microbial DNA Detection Sepsis/Multidrug Resistance 1 Research	Acinetobacter haemolyticus (29430)	DMA00006-R	ROX
dPCR Microbial DNA Detection Sepsis/Multidrug Resistance 1 Research	Enterobacter cloacae (550)	DMA00134-C	Cy5
dPCR Microbial DNA Detection Vaginal Microbiome 1 Research	Neisseria gonorrhoeae (485)	DMA00229-F	FAM
dPCR Microbial DNA Detection Vaginal Microbiome 1 Research	Mycoplasma genitalium (2097)	DMA00222-H	HEX
dPCR Microbial DNA Detection Vaginal Microbiome 1 Research	Mycoplasma pneumoniae (2104)	DMA00225-R	ROX
dPCR Microbial DNA Detection Vaginal Microbiome 1 Research	Limosilactobacillus vaginalis (1633)	DMA00188-C	Cy5
dPCR Microbial DNA Detection Vaginal Microbiome 2 Research	Lactobacillus iners (147802)	DMA00183-F	FAM
dPCR Microbial DNA Detection Vaginal Microbiome 2 Research	Lactobacillus crispatus (47770)	DMA00179-H	HEX
dPCR Microbial DNA Detection Vaginal Microbiome 2 Research	Prevotella bivia (28125)	DMA00262-R	ROX
dPCR Microbial DNA Detection Vaginal Microbiome 2 Research	Prevotella disiens (28130)	DMA00266-C	Cy5
dPCR Microbial DNA Detection Vaginal Microbiome 3 Research	Gardnerella vaginalis 409-05 (553190)	DMA00157-F	FAM
dPCR Microbial DNA Detection Vaginal Microbiome 3 Research	Metamycoplasma hominis (2098)	DMA00223-H	HEX
dPCR Microbial DNA Detection Vaginal Microbiome 3 Research	Fannyhessea vaginae (82135)	DMA00039-R	ROX
dPCR Microbial DNA Detection Vaginal Microbiome 3 Research	Limosilactobacillus vaginalis (1633)	DMA00188-C	Cy5
dPCR Microbial DNA Detection Virulence Genes 1 Research	minor fimbrial subunit	DMA00614-F	FAM
dPCR Microbial DNA Detection Virulence Genes 1 Research	gamma-hemolysin component B	DMA00635-T	TAMRA

<b>Bundle Name</b>	<b>Target Name</b>	<b>GeneGlobe ID</b>	<b>Dye</b>
dPCR Microbial DNA Detection Virulence Genes 1 Research	shiga-like toxin 1 subunit B encoded within prophage CP- 933V	DMA00677-H	HEX
dPCR Microbial DNA Detection Virulence Genes 1 Research	Shiga toxin subunit B, receptor binding subunit	DMA00680-R	ROX
dPCR Microbial DNA Detection Virulence Genes 1 Research	accessory cholera enterotoxin	DMA00597-C	Cy5
dPCR Microbial DNA Detection Virulence Genes 2 Research	pneumolysin	DMA00664-F	FAM
dPCR Microbial DNA Detection Virulence Genes 2 Research	shiga-like toxin 1 subunit B encoded within prophage CP- 933V	DMA00677-H	HEX
dPCR Microbial DNA Detection Virulence Genes 2 Research	shiga-like toxin II A subunit encoded by bacteriophage BP- 933W	DMA00678-T	TAMRA
dPCR Microbial DNA Detection Virulence Genes 2 Research	invasion protein	DMA00642-R	ROX
dPCR Microbial DNA Detection Virulence Genes 2 Research	Shiga toxin subunit B, receptor binding subunit	DMA00680-C	Cy5
dPCR Microbial DNA Detection Virulence Genes 3 Research	glycosyltransferase	DMA00688-F	FAM
dPCR Microbial DNA Detection Virulence Genes 3 Research	pertussis toxin subunit 1 precursor	DMA00668-H	HEX
dPCR Microbial DNA Detection Virulence Genes 3 Research	collagen adhesin protein	DMA00596-T	TAMRA
dPCR Microbial DNA Detection Virulence Genes 3 Research	accessory cholera enterotoxin	DMA00597-R	ROX
dPCR Microbial DNA Detection Virulence Genes 3 Research	endocarditis specific antigen	DMA00611-C	Cy5
dPCR Microbial DNA Detection Virulence Genes 4 Research	glycosyltransferase	DMA00688-F	FAM
dPCR Microbial DNA Detection Virulence Genes 4 Research	pertussis toxin subunit 1 precursor	DMA00668-H	HEX
dPCR Microbial DNA Detection Virulence Genes 4 Research	collagen adhesin protein	DMA00596-T	TAMRA
dPCR Microbial DNA Detection Virulence Genes 4 Research	accessory cholera enterotoxin	DMA00597-R	ROX
dPCR Microbial DNA Detection Virulence Genes 4 Research	endocarditis specific antigen	DMA00611-C	Cy5

<b>Bundle Name</b>	<b>Target Name</b>	<b>GeneGlobe ID</b>	<b>Dye</b>
dPCR Microbial DNA Detection Virulence Genes 5 Research	minor fimbrial subunit	DMA00614-F	FAM
dPCR Microbial DNA Detection Virulence Genes 5 Research	shiga-like toxin 1 subunit B encoded within prophage CP- 933V	DMA00677-H	HEX
dPCR Microbial DNA Detection Virulence Genes 5 Research	gamma-hemolysin component B	DMA00635-T	TAMRA
dPCR Microbial DNA Detection Virulence Genes 5 Research	invasion protein	DMA00642-R	ROX
dPCR Microbial DNA Detection Virulence Genes 5 Research	endocarditis specific antigen	DMA00611-C	Cy5
dPCR Microbial DNA Detection Wastewater 1 Research	<i>Pseudomonas aeruginosa</i> (287)	DMA00278-F	FAM
dPCR Microbial DNA Detection Wastewater 1 Research	<i>Salmonella enterica</i> (28901)	DMA00291-R	ROX
dPCR Microbial DNA Detection Wastewater 1 Research	<i>Vibrio cholerae</i> (666)	DMA00340-H	HEX
dPCR Microbial DNA Detection Wastewater 1 Research	<i>Legionella pneumophila</i> (446)	DMA00192-T	TAMRA
dPCR Microbial DNA Detection Wastewater 1 Research	<i>Yersinia enterocolitica</i> (630)	DMA00344-C	Cy5
dPCR Microbial DNA Detection Wastewater 2 Research	<i>Vibrio cholerae</i> (666)	DMA00340-H	HEX
dPCR Microbial DNA Detection Wastewater 2 Research	<i>Yersinia enterocolitica</i> (630)	DMA00344-R	ROX
dPCR Microbial DNA Detection Wastewater 2 Research	<i>Listeria monocytogenes</i> (1639)	DMA00199-C	Cy5
dPCR Microbial DNA Detection Wastewater 2 Research	<i>Legionella pneumophila</i> (446)	DMA00192-T	TAMRA
dPCR Microbial DNA Detection Wastewater 2 Research	Severe acute respiratory syndrome coronavirus 2 (2697049)	DMA00710-F	FAM
dPCR Microbial DNA Detection Wastewater 3 Research	<i>Clostridium perfringens</i> (1502)	DMA00109-F	FAM
dPCR Microbial DNA Detection Wastewater 3 Research	<i>Legionella pneumophila</i> (446)	DMA00192-H	HEX
dPCR Microbial DNA Detection Wastewater 3 Research	<i>Vibrio cholerae</i> (666)	DMA00340-T	TAMRA
dPCR Microbial DNA Detection Wastewater 3 Research	<i>Leptospira interrogans</i> (173)	DMA00194-R	ROX

Bundle Name	Target Name	GeneGlobe ID	Dye
dPCR Microbial DNA Detection Wastewater 3 Research	Yersinia enterocolitica (630)	DMA00344-C	Cy5

## Ordering Information

Product	Contents	Cat. no.
dPCR Microbial DNA Detection Assays	One tube Microbial DNA dPCR Assay, 200 rxn for 40 µL reaction in Nanoplate 26k, 666 rxn for 12 µL reaction for Nanoplate 8.5k	250207*
	10 QIAcuity Nanoplates 26k 24-well, 11 Nanoplate Seals	250001
QIAcuity Probe PCR Kit (1 mL, 5 mL, 25 mL)	1 mL, 5 mL, or 25 mL Master Mix for the QIAcuity dPCR instrument; water	250101
		250102
		250103
QIAcuity OneStep Advanced Probe Kit (1 mL, 5 mL)	1 mL or 5 mL OneStep Master Mix for the QIAcuity dPCR instrument, RT Mix, Internal Control RNA, Enhancer GC, water	250131
		250132
QIAcuity High Multiplex Probe PCR Kit (1 mL, 5 mL)	1 mL or 5 mL 4x concentrated QIAcuity High Multiplex Probe PCR Master Mix, 2 x 1.9 mL RNase-free Water, QN Internal Control DNA	250133
		250134
QIAcuity UCP Probe PCR Kit (1 mL, 5 mL)	1 mL or 5 mL ultra clean production Master Mix for the QIAcuity dPCR instrument; water	250121
		250122

\* For the respective Assay ID, see the tables above; full assay cat. no. will be available after dye configuration.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.



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