

Microbial DNA qPCR Array

Intestinal Infections

Cat. no. 330261 BAID-1403ZRA

For real-time PCR-based, application-specific microbial identification or profiling

The Intestinal infections Microbial DNA qPCR Array is a research tool used to screen for pathogenic bacteria from gut-derived samples. Gastroenteritis is inflammation of the lining of the gut that is caused by microbial pathogens. The array provides microbiology researchers with a convenient way to quickly detect the presence of pathogenic bacteria in stool or other samples that originate from the gut and are associated with intestinal infections or gastroenteritis, and can be used for monitoring the frequency of these infections in epidemiology research studies. The array contains assays for 45 bacterial pathogens including *Aeromonas* spp., *Bacteroides* spp., *Campylobacter* spp., *Clostridium* spp., *Enterobacter* spp., *Helicobacter* spp., *Shigella dysenteriae*, *Streptococcus* spp., *Vibrio* spp., and *Yersinia* spp. Assays were designed using the 16S rRNA gene as the target, and use PCR amplification primers and hydrolysis-probe detection, which increases the specificity of each assay. Each Intestinal infections Microbial DNA qPCR Array plate can analyze up to two samples simultaneously. Pan-bacteria assays that detect a broad range of bacterial species are included to serve as positive controls for the presence of bacterial DNA, and the Positive PCR Control assay is included to test for the presence of PCR inhibitors or the efficiency of the polymerase chain reaction. The arrays also include the appropriate Microbial qPCR Mastermix and Microbial DNA-Free Water. Identification of which bacterial pathogens are present in a sample is accomplished using data analysis software with imported CT values generated by the PCR instrument software. The simplicity of the product format and operating procedure allow routine and reliable screening of bacterial pathogens from samples in any research laboratory with access to a real-time PCR instrument.



Sample & Assay Technologies

Format	For use with the following real-time cyclers
Format A, with fluorescein	Bio-Rad® models iCycler®, iQ™ 5, MyiQ™, MyiQ2
Format A, with ROX	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well blocks); Bio-Rad/MJ Research Chromo4™; Eppendorf® Mastercycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®
Format C, with ROX	Applied Biosystems models 7500 (Fast, 96-well block), 7900HT (Fast, 96-well block), StepOnePlus™, ViiA 7 (Fast, 96-well block)
Format D, with ROX	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®
Format E, with ROX	Applied Biosystems models 7900HT (384-well block), ViiA 7 (384-well block); Bio-Rad CFX384™
Format F, with ROX	Roche® LightCycler® 480 (96-well block)
Format G, with ROX	Roche LightCycler 480 (384-well block)

Shipping and storage

Microbial DNA qPCR Arrays are shipped at ambient temperature or on blue ice packs. For long-term storage, keep plates at –20°C. Ensure that you have the correct Microbial DNA qPCR Array format for your real-time cycler (see table above). Microbial qPCR Mastermixes are shipped on blue ice packs. For long-term storage, keep Microbial qPCR Mastermixes at –20°C. Microbial DNA-Free Water is shipped at ambient temperature or on blue ice packs. If unopened, Microbial DNA-Free Water can be stored at room temperature or at –20°C. If tube is opened, store Microbial DNA-Free Water at –20°C. Discard tube of Microbial DNA-Free Water if opened three times and use fresh tube of Microbial DNA-Free Water for future experiments.

Note: Ensure that you have the correct Microbial qPCR Mastermixes, with the correct reference dye if required, for your instrument.

Note: Open the package and store the products appropriately immediately upon receipt.

Assay Table

Position	Species (NCBI Tax ID)/Gene	NCBI Tax ID	Antibiotic classification / Gene Description	May detect (species) / Also detect (antibiotic resistance genes) / Associated species (virulence factor genes)	Sensitivity	Assay Catalog #
A01	Acidaminococcus fermentans	905			100	BPID00003A
A02	Aeromonas enteropelogenes(29489), Aeromonas punctata(648), Aeromonas media(651) Aeromonas hydrophila	644		Shewanella benthica(43661)	100	BPID00022A
A03	Aeromonas veronii(654) Aeromonas sobria	646			40	BPID00023A
A04	Akkermansia muciniphila	239935			100	BPID00026A
A05	Anaerococcus lactolyticus	33032			40	BPID00030A
A06	Anaerostipes caccae	105841			20	BPID00033A
A07	Anaerotruncus colihominis	169435			100	BPID00034A
A08	Bacillus anthracis(1392) Bacillus cereus	1396		Bacillus cytotoxicus(580165), Bacillus weihenstephanensis(86662)	40	BPID00043A
A09	Bacteroides fragilis	817			20	BPID00051A
A10	Bacteroides thetaiotaomicron	818		Bacteroides acidifaciens(85831), Bacteroides finegoldii(338188), Bacteroides fragilis(817), Bacteroides ovatus(28116), Bacteroides salyersiae(291644)	40	BPID00060A
A11	Bacteroides vulgatus	821		Bacteroides coprocola(310298)	50	BPID00062A
A12	Blautia hydrogenotrophica	53443			30	BPID00070A
B01	Brevibacillus brevis	1393			50	BPID00073A
B02	Butyrivibrio pullicaecorum	501571		Clostridium thermocellum(1515)	20	BPID00080A
B03	Campylobacter coli(195),Campylobacter subantarcticus(497724), Campylobacter lari(201) Campylobacter jejuni	197			400	BPID00087A
B04	Campylobacter fetus	196			20	BPID00085A
B05	Campylobacter upsaliensis	28080			50	BPID00091A
B06	Citrobacter freundii	546		Dickeya dadantii(204038), Klebsiella oxytoca(571), Serratia marcescens(615)	100	BPID00108A
B07	Clostridium difficile	1496			30	BPID00110A
B08	Clostridium perfringens	1502			100	BPID00112A
B09	Clostridium septicum	1504			40	BPID00113A
B10	Klebsiella oxytoca(571) Enterobacter cloacae	550		Citrobacter farmeri(67824), Enterobacter hormaechei(158836), Klebsiella granulomatis(39824), Klebsiella variicola(244366), Enterobacter aerogenes(548), Klebsiella pneumoniae(573), Serratia marcescens(615)	100	BPID00139A
B11	Enterococcus gallinarum(1353) Enterococcus casseliflavus	1353			20	BPID00141A
B12	Enterococcus faecalis	1351			30	BPID00142A
C01	Enterococcus faecium	1352		Enterococcus avium(33945), Enterococcus durans(53345), Enterococcus hirae(1354)	40	BPID00143A
C02	Enterococcus italicus	246144			30	BPID00144A

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C03	Francisella novicida(264) Francisella tularensis	263			40	BPID00157A
C04	Helicobacter cinaedi	213			200	BPID00174A
C05	Helicobacter fennelliae	215			40	BPID00175A
C06	Helicobacter pylori	210		Helicobacter suis(104628)	50	BPID00176A
C07	Listeria monocytogenes	1639		Listeria welshimeri(1643)	200	BPID00208A
C08	Morganella morganii	582		Escherichia albertii(208962), Providencia alcalifaciens(126385)	100	BPID00224A
C09	Mycobacterium avium	1764			40	BPID00226A
C10	Mycobacterium intracellulare	1767		Mycobacterium avium(1764)	100	BPID00228A
C11	Plesiomonas shigelloides	703			30	BPID00267A
C12	Shigella dysenteriae	622		Salmonella bongori(54736)	100	BPID00307A
D01	Staphylococcus aureus	1280		Staphylococcus epidermidis(1282)	100	BPID00314A
D02	Streptococcus agalactiae	1311			30	BPID00320A
D03	Streptococcus pyogenes	1314			50	BPID00332A
D04	Streptococcus suis	1307			20	BPID00336A
D05	Vibrio cholerae	666			30	BPID00353A
D06	Vibrio parahaemolyticus	670		Vibrio harveyi(669),Vibrio orientalis(28175),Vibrio shilonii(62153)	40	BPID00354A
D07	Vibrio vulnificus	672			40	BPID00355A
D08	Yersinia enterocolitica	630			100	BPID00357A
D09	Yersinia pseudotuberculosis(633) Yersinia pestis	633		Yersinia rohdei(29485)	100	BPID00358A
D10	Pan Bacteria 1					BPCL00360A
D11	Pan Bacteria 3					BPCL00362A
D12	PPC					BPCL00365A
E01	Acidaminococcus fermentans	905			100	BPID00003A
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H11	Pan Bacteria 3					BPCL00362A
H12	PPC					BPCL00365A

No Template Control (NTC)>35

Microbial DNA Positive Control<34

Note: On Stratagene instruments, Ct of the positive control template >34



Ordering Information

Product	Contents	Cat. no.
Microbial DNA qPCR Array	Array plate, master mix, and microbial DNA-free water for detection of microbial species or genes	330261
Related Products		
Supplemental Microbial qPCR Mastermix ROX™	2 tubes of 1.35 ml each	330530
Supplemental Microbial qPCR Mastermix Fluor	2 tubes of 1.35 ml each	330540
Microbial DNA-Free Water	12 tubes of 1.35 ml each	338132

Microbial DNA qPCR Arrays are intended for molecular biology use only. These products are not intended for the diagnosis, prevention, or treatment of a disease..

Visit www.qiagen.com today to view the full array list!

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