



dPCR CNV Probe Assays

Assay/target list

dPCR Copy Number Variation (CNV) Probe Assays enable specific, accurate, reproducible and easy-to-interpret analysis of copy number alterations for individual genes or regions of interest. Assays for more than 200 targets have been PCR wet-lab-validated. The dPCR CNV Probe Assays are available in a tube format as a ready-to-use, 20x-concentrated assay. The tube contains the primer pair and a hydrolysis probe for use with the QIAcuity Probe PCR Kit (DNA targets), the QIAcuity Digital PCR System and QIAcuity Nanoplates. The dPCR CNV Probe Assays are available in 6 different dyes: FAM, HEX, ATTO 550, ROX, Cy5, and ATTO 700. This flexibility allows the mixing and matching of assays for multiplex analysis of up to twelve targets in a single dPCR reaction. Use of Cy5/ATTO 700 assays is only possible in combination with the QIAcuity High Multiplex Probe PCR Kit and QIAcuity Software Suite 3.0 or newer. Multiple assays can be combined in a multiplex reaction, but cross-reactivity has not been tested for all assay combinations.

Additionally, a custom design tool is available on GeneGlobe to address customized assay needs outside of the wet-lab-tested assay offering.

More information on the dPCR Probe CNV Assays can be found at geneglobe.qiagen.com/applications/digital-pcr.

Reference Assays

Gene Symbol	Ensembl Gene ID	Amplicon Length	GeneGlobe ID	Wet-lab verified
AGO1	ENSG00000092847	82	DCR0000536	Yes
AP3B1	ENSG00000132842	79	DCR0000238	Yes
PTBP2	ENSG00000117569	102	DCR0000606	Yes
RPL32	ENSG00000144713	79	DCR0000605	Yes
RPP30	ENSG00000148688	107	DCR0000181	Yes
RPPH1	ENSG00000277209	101	DCR0000609	Yes
TERT	ENSG00000164362	113	DCR0000186	Yes

Centromeric Reference Assays

Gene Symbol	Ensembl Gene ID	Amplicon Length	GeneGlobe ID	Wet-lab verified
ANKRD30A	ENSG00000148513	146	DCC0000413	Yes
ANKRD30B	ENSG00000180777	119	DCC0000510	Yes
DST	ENSG00000151914	103	DCC0000418	Yes
EPHA3	ENSG00000044524	120	DCC0000513	Yes
FRYL	ENSG00000075539	119	DCC0000368	Yes
HAO2	ENSG00000116882	93	DCC0000473	Yes
HCN1	ENSG00000164588	84	DCC0000426	Yes
ID1	ENSG00000125968	95	DCC0000173	Yes
IGFBPL1	ENSG00000137142	74	DCC0000481	Yes

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IL17RA	ENSG00000177663	76	DCC0000194	Yes
IRAK4	ENSG00000198001	101	DCC0000155	Yes
KBTBD4	ENSG00000123444	136	DCC0000542	Yes
MRPS5	ENSG00000144029	111	DCC0000410	Yes
NIPA1	ENSG00000170113	70	DCC0000045	Yes
PLEKHF1	ENSG00000166289	150	DCC0000430	Yes
RBM11	ENSG00000185272	119	DCC0000456	Yes
RNF170	ENSG00000120925	115	DCC0000093	Yes
SPIN4	ENSG00000186767	68	DCC0000464	Yes
TTC5	ENSG00000136319	94	DCC0000398	Yes
USP4	ENSG00000145111	81	DCC0000388	Yes
VOPPI	ENSG00000154978	112	DCC0000420	Yes
WSB1	ENSG00000109046	112	DCC0000382	Yes
ZMYM2	ENSG00000121741	71	DCC0000390	Yes
ZNF843	ENSG00000176723	91	DCC0000446	Yes

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Gene of Interest Assays

Gene Symbol	Ensembl Gene ID	Amplicon Length	GeneGlobe ID	Wet-lab verified
ABCA1	ENSG00000165029	102	DCG0000428	Yes
ABCA3	ENSG00000167972	107	DCG0000433	Yes
ABL1	ENSG00000097007	72	DCG0000072	Yes

ADSL	ENSG00000239900	63	DCG0000228	Yes
AGO1	ENSG00000092847	82	DCG0000536	Yes
AKT1	ENSG00000142208	111	DCG0000600	Yes
AKT2	ENSG00000105221	103	DCG0000604	Yes
AKT3	ENSG00000117020	111	DCG0000092	Yes
ALDH1B1	ENSG00000137124	81	DCG0000497	Yes
ALK	ENSG00000171094	138	DCG0000437	Yes
AMY1A	ENSG00000237763	74	DCG0000357	Yes
ANKRD30A	ENSG00000148513	146	DCG0000413	Yes
ANKRD30B	ENSG00000180777	119	DCG0000510	Yes
ANKRD30C	ENSG00000192322	111	DCG0000238	Yes
APC	ENSG00000134982	116	DCG0000025	Yes
APP	ENSG00000142192	64	DCG0000031	Yes
AR	ENSG00000169083	116	DCG0000043	Yes
ARID1A	ENSG00000117713	73	DCG0000273	Yes
ARL13B	ENSG00000169379	113	DCG0000539	Yes
ARPC1A	ENSG00000241685	116	DCG0000159	Yes
ATM	ENSG00000149311	80	DCG0000037	Yes
B2M	ENSG00000166710	180	DCG0000603	Yes
BCL2	ENSG00000171791	84	DCG0000597	Yes

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BMPR1A	ENSG00000107779	100	DCG0000378	Yes
BRCA1	ENSG00000012048	84	DCG0000364	Yes
BRCA2	ENSG00000139618	146	DCG0000177	Yes
CCL3L3	ENSG00000276085	91	DCG0000615	Yes
CCND1	ENSG00000110092	107	DCG0000595	Yes
CCNE1	ENSG00000105173	170	DCG0000613	Yes
CD44	ENSG00000026508	150	DCG0000231	Yes
CDH1	ENSG00000039068	139	DCG0000061	Yes
CDH18	ENSG00000145526	76	DCG0000035	Yes
CDK4	ENSG00000135446	88	DCG0000281	Yes
CDK6	ENSG00000164433	71	DCG0000135	Yes
CDKN1B	ENSG00000111276	71	DCG0000234	Yes
CDKN2A	ENSG00000147889	133	DCG0000476	Yes
CDKN2B	ENSG00000147883	89	DCG0000128	Yes
CDKN2C	ENSG00000123080	150	DCG0000097	Yes
CREBBP	ENSG00000005339	80	DCG0000360	Yes
CTNNB1	ENSG00000168036	84	DCG0000042	Yes
CTNND1	ENSG00000198561	120	DCG0000156	Yes
DCC	ENSG00000187323	94	DCG0000593	Yes
DCUN1D4	ENSG00000109184	95	DCG0000576	Yes

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DEFB4A	ENSG00000171711	115	DCG0000351	Yes
DOCK8	ENSG00000107099	117	DCG0000082	Yes
DOP1B	ENSG00000142197	76	DCG0000032	Yes
DPP10	ENSG00000175497	99	DCG0000047	Yes
DST	ENSG00000151914	103	DCG0000418	Yes
DUSP6	ENSG00000139318	146	DCG0000116	Yes
EGFR	ENSG00000146648	141	DCG0000180	Yes
EML4-AS1	ENSG00000224875	109	DCG0000548	Yes
EMSY	ENSG00000158636	101	DCG0000133	Yes
EPHA3	ENSG00000044524	120	DCG0000513	Yes
ERBB1	ENSG00000141130	111	DCG0000218	Yes
ERBB3	ENSG00000065361	83	DCG0000263	Yes
ERBB4	ENSG00000178568	91	DCG0000145	Yes
ETS2	ENSG00000157557	116	DCG0000422	Yes
EZH2	ENSG00000106462	115	DCG0000080	Yes
FANCA	ENSG00000187741	92	DCG0000153	Yes
FAT1	ENSG00000083857	92	DCG0000374	Yes
FEZ1	ENSG00000149557	85	DCG0000129	Yes
FGD1	ENSG00000102302	82	DCG0000313	Yes
FGFR1	ENSG00000077782	129	DCG0000207	Yes

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FGFR2	ENSG00000066468	118	DCG0000004	Yes
FHIT	ENSG00000189283	119	DCG0000050	Yes
FLRT2	ENSG00000185070	103	DCG0000148	Yes
FLT1	ENSG00000102755	82	DCG0000013	Yes
FLT3	ENSG00000122025	94	DCG0000392	Yes
FLT4	ENSG00000037280	82	DCG0000261	Yes
FRYL	ENSG00000075539	119	DCG0000368	Yes
FYN	ENSG00000010810	122	DCG0000055	Yes
GATA1	ENSG00000102145	69	DCG0000342	Yes
GATA2	ENSG00000179348	104	DCG0000343	Yes
GATA3	ENSG00000066574	73	DCG0000118	Yes
GATA6	ENSG00000141448	98	DCG0000239	Yes
GBA	ENSG00000177628	64	DCG0000341	Yes
GINS1	ENSG00000101003	129	DCG0000167	Yes
GNAS	ENSG00000087460	103	DCG0000068	Yes
GREB1L	ENSG00000141449	98	DCG0000408	Yes
GRM7	ENSG00000196277	93	DCG0000154	Yes
HACE1	ENSG00000085382	85	DCG0000008	Yes
HAO2	ENSG00000116882	93	DCG0000473	Yes
HCN1	ENSG00000164588	84	DCG0000426	Yes

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Hk2	ENSMUSG00000000628	94	DCG0000607	Yes
HNF1A	ENSG00000135100	97	DCG0000105	Yes
HNF1B	ENSG00000275410	105	DCG0000312	Yes
HOXA9	ENSG00000078399	80	DCG0000372	Yes
HRAS	ENSG00000174775	103	DCG0000612	Yes
HSPA9	ENSG00000113013	96	DCG0000019	Yes
ID1	ENSG00000125968	95	DCG0000173	Yes
IDE	ENSG00000119912	67	DCG0000022	Yes
IDH1	ENSG00000138413	101	DCG0000283	Yes
IDH2	ENSG00000182054	81	DCG0000291	Yes
IGF1R	ENSG00000140443	79	DCG0000119	Yes
IGF2R	ENSG00000197081	83	DCG0000051	Yes
IGFBPL1	ENSG00000137142	74	DCG0000481	Yes
IKZF1	ENSG00000185811	117	DCG0000460	Yes
IL17RA	ENSG00000177663	76	DCG0000194	Yes
IQGAP1	ENSG00000140575	78	DCG0000029	Yes
IRAK4	ENSG00000198001	101	DCG0000155	Yes
IRGM	ENSG00000237693	87	DCG0000253	Yes
JAK2	ENSG00000096968	104	DCG0000602	Yes

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JUN	ENSG00000177606	109	DCG0000596	Yes
KBTBD4	ENSG00000123444	136	DCG0000542	Yes
KDR	ENSG00000128052	107	DCG0000023	Yes
KEL	ENSG00000197993	149	DCG0000608	Yes
KHDRBS2	ENSG00000112232	83	DCG0000470	Yes
KIF21A	ENSG00000139116	67	DCG0000554	Yes
KIT	ENSG00000157404	75	DCG0000040	Yes
KRAS	ENSG00000133703	119	DCG0000104	Yes
LAMB1	ENSG00000091136	84	DCG0000010	Yes
LCP1	ENSG00000136167	98	DCG0000026	Yes
LDA	ENSG00000177738	111	DCG0000084	Yes
LMNA	ENSG00000160789	143	DCG0000241	Yes
LMNB1	ENSG00000113368	80	DCG0000020	Yes
LRATD2	ENSG00000168672	130	DCG0000140	Yes
LRRC4C	ENSG00000148948	109	DCG0000036	Yes
MAG11	ENSG00000151276	86	DCG0000038	Yes
MAG12	ENSG00000187391	78	DCG0000049	Yes
MAP2K1	ENSG00000169032	92	DCG0000304	Yes
MAP2K4	ENSG00000065559	114	DCG0000264	Yes
MAP3K8	ENSG00000107968	140	DCG0000611	Yes

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MAPK1	ENSG00000100030	136	DCG0000616	Yes
MDM2	ENSG00000135679	99	DCG0000590	Yes
MET	ENSG00000105976	83	DCG0000015	Yes
MLH1	ENSG00000076242	71	DCG0000005	Yes
MRPS5	ENSG00000144029	111	DCG0000410	Yes
MRTFB	ENSG00000186260	138	DCG0000614	Yes
MSH2	ENSG00000095002	76	DCG0000208	Yes
MSH6	ENSG00000116062	116	DCG0000021	Yes
MTOR	ENSG00000198793	118	DCG0000594	Yes
MTX1P1	ENSG00000236675	70	DCG0000582	Yes
MYC	ENSG00000136997	65	DCG0000112	Yes
MYT1L	ENSG00000186487	74	DCG0000150	Yes
NBEA	ENSG00000172915	65	DCG0000244	Yes
NCOR1	ENSG00000141027	132	DCG0000120	Yes
NF1	ENSG00000196712	101	DCG0000293	Yes
NF2	ENSG00000186575	83	DCG0000462	Yes
NFAT5	ENSG00000102908	74	DCG0000014	Yes
NFATC2	ENSG00000101096	98	DCG0000011	Yes
NIPA1	ENSG00000170113	70	DCG0000045	Yes

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