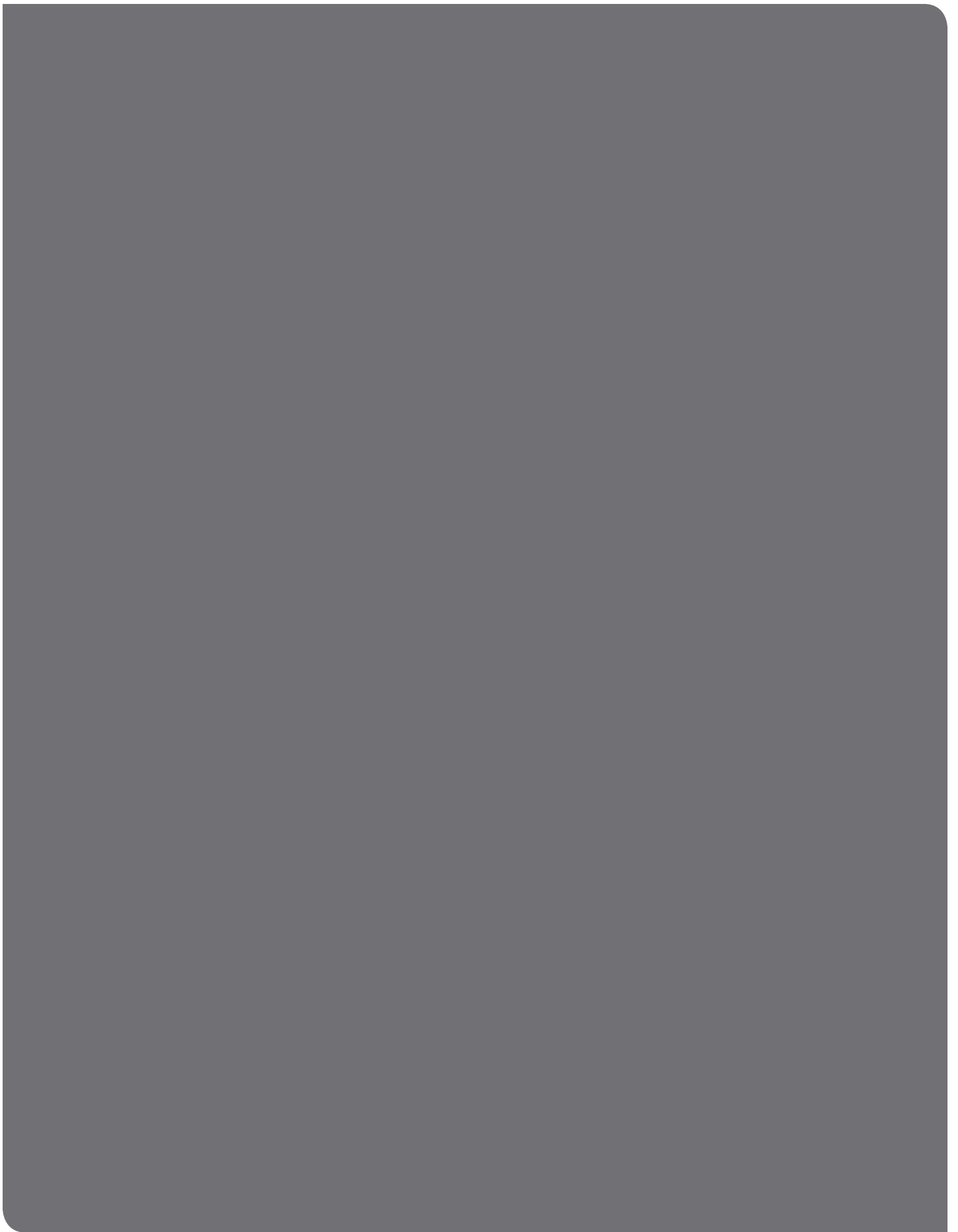




Wet-Lab Validated ddPCR Assays for Mutation Detection and Copy Number Determination



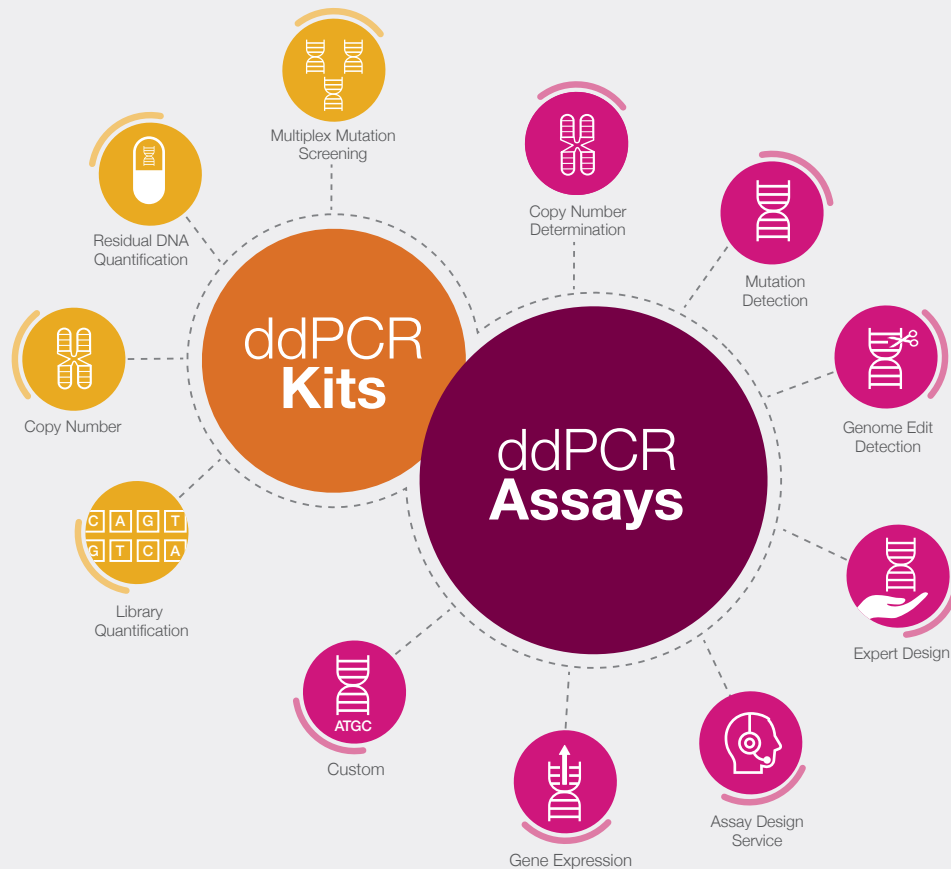


Droplet Digital PCR ASSAYS AND KITS

Bio-Rad offers a comprehensive portfolio of Droplet Digital PCR (ddPCR) Assays and Kits.

A subset of mutation detection assays and copy number determination assays have been wet-lab validated.

Visit bio-rad.com/DigitalAssays for the complete menu of available Droplet Digital PCR Assays.



Wet-Lab Validated ddPCR Mutation Detection Assays

- Available for >200 targets
- Guaranteed to work when used as instructed
- Validation data available for review and download
- Available in single-tube* or 2-tube formats**



Wet-Lab Validated ddPCR Copy Number Determination Assays

- Available for >700 targets
- Centromeric reference assays available for ~60 targets
- Validation data available for review and download

Droplet Digital PCR Assay Site

Don't see a wet-lab validated assay for your target? Bio-Rad's Droplet Digital PCR Assay site at bio-rad.com/DigitalAssays instantly designs assays for targets/sequences for which validated assays are not available.

Take advantage of 24/7 service to find or design and buy an assay in three simple steps:

1. Choose your application or search by Unique Assay ID.
2. Enter target or sequence information.
3. Pick a size and add to your Bio-Rad cart.

* Single-tube formats contain a set of primers, a mutant, and a wild-type probe. For customer convenience, the mutant and wild-type probes are premixed and allow for the addition of an extra 1 µl of sample in the ddPCR reaction.

** Two-tube formats include mutant and wild-type probes in separate tubes, which must be combined to create a complete mutation detection assay.



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
ABL1	p.E255K	COSM12573	Chr9	dHsaCP2506764	FAM	61
				dHsaCP2506765	HEX	61
				dHsaMDV2516764	FAM + HEX	61
ABL1	p.T315I	COSM12560	Chr9	dHsaCP2506762	FAM	70
				dHsaCP2506763	HEX	70
				dHsaMDV2516762	FAM + HEX	70
ABL1	p.Y253H	COSM12576	Chr9	dHsaCP2506766	FAM	100
				dHsaCP2506767	HEX	100
				dHsaMDV2516766	FAM + HEX	100
AKT1	p.E17K	COSM33765	Chr14	dHsaCP2000031	FAM	64
				dHsaCP2000032	HEX	64
				dHsaMDV2010031	FAM + HEX	64
ALK	p.F1174L	COSM28055	Chr2	dHsaCP2000083	FAM	65
				dHsaCP2000084	HEX	65
				dHsaMDV2010083	FAM + HEX	65
ALK	p.G1269A	COSM1169707	Chr2	dHsaCP2000081	FAM	64
				dHsaCP2000082	HEX	64
				dHsaMDV2010081	FAM + HEX	64
ALK	p.R1275Q	COSM28056	Chr2	dHsaCP2506768	FAM	64
				dHsaCP2506769	HEX	64
				dHsaMDV2516768	FAM + HEX	64
APC	p.Q1378*	COSM18862	Chr5	dHsaCP2506770	FAM	65
				dHsaCP2506771	HEX	65
				dHsaMDV2516770	FAM + HEX	65
APC	p.R1450*	COSM13127	Chr5	dHsaCP2500508	FAM	63
				dHsaCP2500509	HEX	63
				dHsaMDV2510508	FAM + HEX	63
BRAF	p.G469A	COSM460	Chr7	dHsaCP2506932	FAM	70
				dHsaCP2506933	HEX	70
				dHsaMDV2516932	FAM + HEX	70
BRAF	p.V600E	COSM476	Chr7	dHsaCP2000027	FAM	91
				dHsaCP2000028	HEX	91
				dHsaMDV2010027	FAM + HEX	91
BRAF	p.V600K	COSM473	Chr7	dHsaCP2000035	FAM	91
				dHsaCP2000036	HEX	91
				dHsaMDV2010035	FAM + HEX	91
BRAF	p.V600R	COSM474	Chr7	dHsaCP2000037	FAM	91
				dHsaCP2000038	HEX	91
				dHsaMDV2010037	FAM + HEX	91
CDKN2A	p.P114L	COSM12476	Chr9	dHsaCP2506934	FAM	75
				dHsaCP2506935	HEX	75
				dHsaMDV2516934	FAM + HEX	75
CDKN2A	p.P48L	COSM12743	Chr9	dHsaCP2506832	FAM	59
				dHsaCP2506833	HEX	59
				dHsaMDV2516832	FAM + HEX	59
CDKN2A	p.R80*	COSM12475	Chr9	dHsaCP2500564	FAM	137
				dHsaCP2500565	HEX	137
				dHsaMDV2510564	FAM + HEX	137



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
CDKN2A	p.W110*	COSM12547	Chr9	dHsaCP2506912	FAM	85
				dHsaCP2506913	HEX	85
				dHsaMDV2516912	FAM + HEX	85
CTNNB1	p.D32N	COSM5672	Chr3	dHsaCP2506754	FAM	61
				dHsaCP2506755	HEX	61
				dHsaMDV2516754	FAM + HEX	61
CTNNB1	p.D32Y	COSM5661	Chr3	dHsaCP2000091	FAM	64
				dHsaCP2000092	HEX	64
				dHsaMDV2010091	FAM + HEX	64
CTNNB1	p.G34E	COSM5671	Chr3	dHsaCP2000097	FAM	64
				dHsaCP2000098	HEX	64
				dHsaMDV2010097	FAM + HEX	64
CTNNB1	p.G34V	COSM5670	Chr3	dHsaCP2500550	FAM	64
				dHsaCP2500551	HEX	64
				dHsaMDV2510550	FAM + HEX	64
CTNNB1	p.G48D	COSM5733	Chr3	dHsaCP2506842	FAM	65
				dHsaCP2506843	HEX	65
				dHsaMDV2516842	FAM + HEX	65
CTNNB1	p.S33C	COSM5677	Chr3	dHsaCP2000119	FAM	64
				dHsaCP2000120	HEX	64
				dHsaMDV2010119	FAM + HEX	64
CTNNB1	p.S33F	COSM5669	Chr3	dHsaCP2500532	FAM	64
				dHsaCP2500533	HEX	64
				dHsaMDV2510532	FAM + HEX	64
CTNNB1	p.S33P	COSM5682	Chr3	dHsaCP2506846	FAM	63
				dHsaCP2506847	HEX	63
				dHsaMDV2516846	FAM + HEX	63
CTNNB1	p.S33Y	COSM5673	Chr3	dHsaCP2506790	FAM	64
				dHsaCP2506791	HEX	64
				dHsaMDV2516790	FAM + HEX	64
CTNNB1	p.S37C	COSM5679	Chr3	dHsaCP2000115	FAM	65
				dHsaCP2000116	HEX	65
				dHsaMDV2010115	FAM + HEX	65
CTNNB1	p.S37F	COSM5662	Chr3	dHsaCP2000111	FAM	65
				dHsaCP2000112	HEX	65
				dHsaMDV2010111	FAM + HEX	65
CTNNB1	p.S37Y	COSM5666	Chr3	dHsaCP2500496	FAM	65
				dHsaCP2500497	HEX	65
				dHsaMDV2510496	FAM + HEX	65
CTNNB1	p.S45F	COSM5667	Chr3	dHsaCP2000117	FAM	62
				dHsaCP2000118	HEX	62
				dHsaMDV2010117	FAM + HEX	62
CTNNB1	p.T41A	COSM5664	Chr3	dHsaCP2500548	FAM	65
				dHsaCP2500549	HEX	65
				dHsaMDV2510548	FAM + HEX	65
CTNNB1	p.T41I	COSM5676	Chr3	dHsaCP2506940	FAM	65
				dHsaCP2506941	HEX	65
				dHsaMDV2516940	FAM + HEX	65



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
DNMT3A	p.R882H	COSM52944	Chr2	dHsaCP2000089	FAM	57
				dHsaCP2000090	HEX	57
				dHsaMDV2010089	FAM + HEX	57
EGFR	p.E709A	COSM13427	Chr7	dHsaCP2506858	FAM	70
				dHsaCP2506859	HEX	70
				dHsaMDV2516858	FAM + HEX	70
EGFR	p.E709K	COSM12988	Chr7	dHsaCP2506792	FAM	70
				dHsaCP2506793	HEX	70
				dHsaMDV2516792	FAM + HEX	70
EGFR	p.E746_A750delELREA	COSM6223	Chr7	dHsaCP2000039	FAM	78
				dHsaCP2000040	HEX	78
				dHsaMDV2010039	FAM + HEX	78
EGFR	p.G719S	COSM6252	Chr7	dHsaCP2000041	FAM	65
				dHsaCP2000042	HEX	65
				dHsaMDV2010041	FAM + HEX	65
EGFR	p.L747_A750>P	COSM12382	Chr7	dHsaCP2506748	FAM	84
				dHsaCP2506749	HEX	84
				dHsaMDV2516748	FAM + HEX	84
EGFR	p.L747_P753>S	COSM12370	Chr7	dHsaCP2500546	FAM	84
				dHsaCP2500547	HEX	84
				dHsaMDV2510546	FAM + HEX	84
EGFR	p.L747_S752delLREATS	COSM6255	Chr7	dHsaCP2506758	FAM	84
				dHsaCP2506759	HEX	84
				dHsaMDV2516758	FAM + HEX	84
EGFR	p.L747_T751>P	COSM12383	Chr7	dHsaCP2506890	FAM	84
				dHsaCP2506891	HEX	84
				dHsaMDV2516890	FAM + HEX	84
EGFR	p.L747_T751delLREAT	COSM6254	Chr7	dHsaCP2506752	FAM	84
				dHsaCP2506753	HEX	84
				dHsaMDV2516752	FAM + HEX	84
EGFR	p.L858R	COSM6224	Chr7	dHsaCP2000021	FAM	73
				dHsaCP2000022	HEX	73
				dHsaMDV2010021	FAM + HEX	73
EGFR	p.L861Q	COSM6213	Chr7	dHsaCP2000043	FAM	64
				dHsaCP2000044	HEX	64
				dHsaMDV2010043	FAM + HEX	64
EGFR	p.S768I	COSM6241	Chr7	dHsaCP2506892	FAM	80
				dHsaCP2506893	HEX	80
				dHsaMDV2516892	FAM + HEX	80
EGFR	p.T790M	COSM6240	Chr7	dHsaCP2000019	FAM	80
				dHsaCP2000020	HEX	80
				dHsaMDV2010019	FAM + HEX	80
EZH2	p.Y646F	COSM37028	Chr7	dHsaCP2506772	FAM	70
				dHsaCP2506773	HEX	70
				dHsaMDV2516772	FAM + HEX	70
EZH2	p.Y646N	COSM37031	Chr7	dHsaCP2506844	FAM	69
				dHsaCP2506845	HEX	69
				dHsaMDV2516844	FAM + HEX	69



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
EZH2	p.Y646S	COSM37029	Chr7	dHsaCP2506848	FAM	70
				dHsaCP2506849	HEX	70
				dHsaMDV2516848	FAM + HEX	70
FBXW7	p.R465C	COSM22932	Chr4	dHsaCP2500506	FAM	80
				dHsaCP2500507	HEX	80
				dHsaMDV2510506	FAM + HEX	80
FBXW7	p.R465H	COSM22965	Chr4	dHsaCP2506800	FAM	80
				dHsaCP2506801	HEX	80
				dHsaMDV2516800	FAM + HEX	80
FBXW7	p.R505C	COSM22975	Chr4	dHsaCP2506774	FAM	64
				dHsaCP2506775	HEX	64
				dHsaMDV2516774	FAM + HEX	64
FGFR2	p.S252W	COSM36903	Chr10	dHsaCP2000045	FAM	63
				dHsaCP2000046	HEX	63
				dHsaMDV2010045	FAM + HEX	63
FGFR3	p.G370C	COSM716	Chr4	dHsaCP2506742	FAM	56
				dHsaCP2506743	HEX	56
				dHsaMDV2516742	FAM + HEX	56
FGFR3	p.G380R	COSM24842	Chr4	dHsaCP2500516	FAM	60
				dHsaCP2500517	HEX	60
				dHsaMDV2510516	FAM + HEX	60
FGFR3	p.R248C	COSM714	Chr4	dHsaCP2506906	FAM	57
				dHsaCP2506907	HEX	57
				dHsaMDV2516906	FAM + HEX	57
FGFR3	p.S249C	COSM715	Chr4	dHsaCP2506760	FAM	57
				dHsaCP2506761	HEX	57
				dHsaMDV2516760	FAM + HEX	57
FGFR3	p.S371C	COSM17461	Chr4	dHsaCP2506802	FAM	75
				dHsaCP2506803	HEX	75
				dHsaMDV2516802	FAM + HEX	75
FGFR3	p.Y373C	COSM718	Chr4	dHsaCP2000103	FAM	75
				dHsaCP2000104	HEX	75
				dHsaMDV2010103	FAM + HEX	75
FLT3	p.D835E	COSM788	Chr13	dHsaCP2506864	FAM	68
				dHsaCP2506865	HEX	68
				dHsaMDV2516864	FAM + HEX	68
FLT3	p.D835H	COSM785	Chr13	dHsaCP2500492	FAM	68
				dHsaCP2500493	HEX	68
				dHsaMDV2510492	FAM + HEX	68
FLT3	p.D835V	COSM784	Chr13	dHsaCP2506838	FAM	68
				dHsaCP2506839	HEX	68
				dHsaMDV2516838	FAM + HEX	68
FLT3	p.D835Y	COSM783	Chr13	dHsaCP2000047	FAM	67
				dHsaCP2000048	HEX	67
				dHsaMDV2010047	FAM + HEX	67
FOXL2	p.C134W	COSM33661	Chr3	dHsaCP2000085	FAM	57
				dHsaCP2000086	HEX	57
				dHsaMDV2010085	FAM + HEX	57



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
GNA11	p.Q209L	COSM52969	Chr19	dHsaCP2000049	FAM	62
				dHsaCP2000050	HEX	62
				dHsaMDV2010049	FAM + HEX	62
GNAQ	p.Q209L	COSM28757	Chr9	dHsaCP2000051	FAM	65
				dHsaCP2000052	HEX	65
				dHsaMDV2010051	FAM + HEX	65
GNAQ	p.Q209P	COSM28758	Chr9	dHsaCP2506794	FAM	65
				dHsaCP2506795	HEX	65
				dHsaMDV2516794	FAM + HEX	65
GNAS	p.R201C	COSM27887	Chr20	dHsaCP2500562	FAM	68
				dHsaCP2500563	HEX	68
				dHsaMDV2510562	FAM + HEX	68
GNAS	p.R201H	COSM27895	Chr20	dHsaCP2506796	FAM	68
				dHsaCP2506797	HEX	68
				dHsaMDV2516796	FAM + HEX	68
H3F3A	p.K28M	COSM327928	Chr1	dHsaCP2500510	FAM	129
				dHsaCP2500511	HEX	129
				dHsaMDV2510510	FAM + HEX	129
HRAS	p.G12C	COSM481	Chr11	dHsaCP2506798	FAM	63
				dHsaCP2506799	HEX	63
				dHsaMDV2516798	FAM + HEX	63
HRAS	p.G12D	COSM484	Chr11	dHsaCP2500566	FAM	63
				dHsaCP2500567	HEX	63
				dHsaMDV2510566	FAM + HEX	63
HRAS	p.G12S	COSM480	Chr11	dHsaCP2500568	FAM	63
				dHsaCP2500569	HEX	63
				dHsaMDV2510568	FAM + HEX	63
HRAS	p.G12V	COSM483	Chr11	dHsaCP2000025	FAM	65
				dHsaCP2000026	HEX	65
				dHsaMDV2010025	FAM + HEX	65
HRAS	p.G13S	COSM487	Chr11	dHsaCP2506882	FAM	63
				dHsaCP2506883	HEX	63
				dHsaMDV2516882	FAM + HEX	63
HRAS	p.Q61H	COSM502	Chr11	dHsaCP2506812	FAM	65
				dHsaCP2506813	HEX	65
				dHsaMDV2516812	FAM + HEX	65
HRAS	p.Q61K	COSM496	Chr11	dHsaCP2506814	FAM	65
				dHsaCP2506815	HEX	65
				dHsaMDV2516814	FAM + HEX	65
HRAS	p.Q61L	COSM498	Chr11	dHsaCP2500556	FAM	65
				dHsaCP2500557	HEX	65
				dHsaMDV2510556	FAM + HEX	65
HRAS	p.Q61R	COSM499	Chr11	dHsaCP2500576	FAM	65
				dHsaCP2500577	HEX	65
				dHsaMDV2510576	FAM + HEX	65
IDH1	p.R132C	COSM28747	Chr2	dHsaCP2000053	FAM	63
				dHsaCP2000054	HEX	63
				dHsaMDV2010053	FAM + HEX	63



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
IDH1	p.R132G	COSM28749	Chr2	dHsaCP2500512	FAM	78
				dHsaCP2500513	HEX	78
				dHsaMDV2510512	FAM + HEX	78
IDH1	p.R132H	COSM28746	Chr2	dHsaCP2000055	FAM	63
				dHsaCP2000056	HEX	63
				dHsaMDV2010055	FAM + HEX	63
IDH1	p.R132L	COSM28750	Chr2	dHsaCP2506818	FAM	78
				dHsaCP2506819	HEX	78
				dHsaMDV2516818	FAM + HEX	78
IDH1	p.R132S	COSM28748	Chr2	dHsaCP2506816	FAM	78
				dHsaCP2506817	HEX	78
				dHsaMDV2516816	FAM + HEX	78
IDH2	p.R140Q	COSM41590	Chr15	dHsaCP2000057	FAM	65
				dHsaCP2000058	HEX	65
				dHsaMDV2010057	FAM + HEX	65
IDH2	p.R172K	COSM33733	Chr15	dHsaCP2000059	FAM	63
				dHsaCP2000060	HEX	63
				dHsaMDV2010059	FAM + HEX	63
IDH2	p.R172M	COSM33732	Chr15	dHsaCP2506836	FAM	63
				dHsaCP2506837	HEX	63
				dHsaMDV2516836	FAM + HEX	63
IDH2	p.R172W	COSM34039	Chr15	dHsaCP2506938	FAM	63
				dHsaCP2506939	HEX	63
				dHsaMDV2516938	FAM + HEX	63
JAK2	p.V617F	COSM12600	Chr9	dHsaCP2000061	FAM	70
				dHsaCP2000062	HEX	70
				dHsaMDV2010061	FAM + HEX	70
KIT	p.D816H	COSM1311	Chr4	dHsaCP2506822	FAM	98
				dHsaCP2506823	HEX	98
				dHsaMDV2516822	FAM + HEX	98
KIT	p.D816V	COSM1314	Chr4	dHsaCP2000023	FAM	98
				dHsaCP2000024	HEX	98
				dHsaMDV2010023	FAM + HEX	98
KIT	p.D816Y	COSM1310	Chr4	dHsaCP2506820	FAM	98
				dHsaCP2506821	HEX	98
				dHsaMDV2516820	FAM + HEX	98
KIT	p.K642E	COSM1304	Chr4	dHsaCP2506824	FAM	65
				dHsaCP2506825	HEX	65
				dHsaMDV2516824	FAM + HEX	65
KIT	p.L576P	COSM1290	Chr4	dHsaCP2506826	FAM	80
				dHsaCP2506827	HEX	80
				dHsaMDV2516826	FAM + HEX	80
KIT	p.V559D	COSM1252	Chr4	dHsaCP2506828	FAM	79
				dHsaCP2506829	HEX	79
				dHsaMDV2516828	FAM + HEX	79
KIT	p.V560D	COSM1257	Chr4	dHsaCP2506860	FAM	78
				dHsaCP2506861	HEX	78
				dHsaMDV2516860	FAM + HEX	78



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
KIT	p.V825A	COSM1323	Chr4	dHsaCP2506878	FAM	69
				dHsaCP2506879	HEX	69
				dHsaMDV2516878	FAM + HEX	69
KRAS	p.A146T	COSM19404	Chr12	dHsaCP2000079	FAM	80
				dHsaCP2000080	HEX	80
				dHsaMDV2010079	FAM + HEX	80
KRAS	p.G12A	COSM522	Chr12	dHsaCP2000003	FAM	90
				dHsaCP2000004	HEX	90
				dHsaMDV2010003	FAM + HEX	90
KRAS	p.G12A	COSM522	Chr12	dHsaCP2500586	FAM	57
				dHsaCP2500587	HEX	57
				dHsaMDV2510586	FAM + HEX	57
KRAS	p.G12C	COSM516	Chr12	dHsaCP2000007	FAM	90
				dHsaCP2000008	HEX	90
				dHsaMDV2010007	FAM + HEX	90
KRAS	p.G12C	COSM516	Chr12	dHsaCP2500585	HEX	57
				dHsaCP2500584	FAM	57
				dHsaMDV2510584	FAM + HEX	57
KRAS	p.G12D	COSM521	Chr12	dHsaCP2000001	FAM	90
				dHsaCP2000002	HEX	90
				dHsaMDV2010001	FAM + HEX	90
KRAS	p.G12D	COSM521	Chr12	dHsaCP2500596	FAM	57
				dHsaCP2500597	HEX	57
				dHsaMDV2510596	FAM + HEX	57
KRAS	p.G12R	COSM518	Chr12	dHsaCP2000009	FAM	90
				dHsaCP2000010	HEX	90
				dHsaMDV2010009	FAM + HEX	90
KRAS	p.G12R	COSM518	Chr12	dHsaCP2500590	FAM	57
				dHsaCP2500591	HEX	57
				dHsaMDV2510590	FAM + HEX	57
KRAS	p.G12S	COSM517	Chr12	dHsaCP2000011	FAM	90
				dHsaCP2000012	HEX	90
				dHsaMDV2010011	FAM + HEX	90
KRAS	p.G12S	COSM517	Chr12	dHsaCP2500588	FAM	57
				dHsaCP2500589	HEX	57
				dHsaMDV2510588	FAM + HEX	57
KRAS	p.G12V	COSM520	Chr12	dHsaCP2000005	FAM	90
				dHsaCP2000006	HEX	90
				dHsaMDV2010005	FAM + HEX	90
KRAS	p.G12V	COSM520	Chr12	dHsaCP2500592	FAM	57
				dHsaCP2500593	HEX	57
				dHsaMDV2510592	FAM + HEX	57
KRAS	p.G13C	COSM527	Chr12	dHsaCP2000113	FAM	90
				dHsaCP2000114	HEX	90
				dHsaMDV2010113	FAM + HEX	90
KRAS	p.G13C	COSM527	Chr12	dHsaCP2500594	FAM	57
				dHsaCP2500595	HEX	57
				dHsaMDV2510594	FAM + HEX	57



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
KRAS	p.G13D	COSM532	Chr12	dHsaCP2000013	FAM	90
				dHsaCP2000014	HEX	90
				dHsaMDV2010013	FAM + HEX	90
KRAS	p.G13D	COSM532	Chr12	dHsaCP2500598	FAM	57
				dHsaCP2500599	HEX	57
				dHsaMDV2510598	FAM + HEX	57
KRAS	p.G13R	COSM529	Chr12	dHsaCP2506874	FAM	57
				dHsaCP2506875	HEX	57
				dHsaMDV2516874	FAM + HEX	57
KRAS	p.G13S	COSM528	Chr12	dHsaCP2506876	FAM	90
				dHsaCP2506877	HEX	90
				dHsaMDV2516876	FAM + HEX	90
KRAS	p.G13V	COSM534	Chr12	dHsaCP2506804	FAM	90
				dHsaCP2506805	HEX	90
				dHsaMDV2516804	FAM + HEX	90
KRAS	p.Q61H	COSM555	Chr12	dHsaCP2000131	FAM	61
				dHsaCP2000132	HEX	61
				dHsaMDV2010131	FAM + HEX	61
KRAS	p.Q61H	COSM554	Chr12	dHsaCP2000133	FAM	61
				dHsaCP2000134	HEX	61
				dHsaMDV2010133	FAM + HEX	61
KRAS	p.Q61L	COSM553	Chr12	dHsaCP2000101	FAM	61
				dHsaCP2000102	HEX	61
				dHsaMDV2010101	FAM + HEX	61
KRAS	p.Q61R	COSM552	Chr12	dHsaCP2000135	FAM	61
				dHsaCP2000136	HEX	61
				dHsaMDV2010135	FAM + HEX	61
MED12	p.G44D	COSM131596	ChrX	dHsaCP2506806	FAM	65
				dHsaCP2506807	HEX	65
				dHsaMDV2516806	FAM + HEX	65
MED12	p.G44V	COSM131597	ChrX	dHsaCP2506886	FAM	65
				dHsaCP2506887	HEX	65
				dHsaMDV2516886	FAM + HEX	65
MET	p.Y1253D	COSM700	Chr7	dHsaCP2506840	FAM	78
				dHsaCP2506841	HEX	78
				dHsaMDV2516840	FAM + HEX	78
MPL	p.W515L	COSM18918	Chr1	dHsaCP2500572	FAM	64
				dHsaCP2500573	HEX	64
				dHsaMDV2510572	FAM + HEX	64
NOTCH1	p.P2514fs*4	COSM12774	Chr9	dHsaCP2500500	FAM	65
				dHsaCP2500501	HEX	65
				dHsaMDV2510500	FAM + HEX	65
NRAS	p.A18T	COSM577	Chr1	dHsaCP2506834	FAM	65
				dHsaCP2506835	HEX	65
				dHsaMDV2516834	FAM + HEX	65
NRAS	p.G12C	COSM562	Chr1	dHsaCP2500530	FAM	70
				dHsaCP2500531	HEX	70
				dHsaMDV2510530	FAM + HEX	70



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
NRAS	p.G12D	COSM564	Chr1	dHsaCP2000095	FAM	70
				dHsaCP2000096	HEX	70
				dHsaMDV2010095	FAM + HEX	70
NRAS	p.G12R	COSM561	Chr1	dHsaCP2500560	FAM	70
				dHsaCP2500561	HEX	70
				dHsaMDV2510560	FAM + HEX	70
NRAS	p.G12S	COSM563	Chr1	dHsaCP2000093	FAM	70
				dHsaCP2000094	HEX	70
				dHsaMDV2010093	FAM + HEX	70
NRAS	p.G12V	COSM566	Chr1	dHsaCP2500528	FAM	70
				dHsaCP2500529	HEX	70
				dHsaMDV2510528	FAM + HEX	70
NRAS	p.G13A	COSM575	Chr1	dHsaCP2506808	FAM	70
				dHsaCP2506809	HEX	70
				dHsaMDV2516808	FAM + HEX	70
NRAS	p.G13C	COSM570	Chr1	dHsaCP2506776	FAM	70
				dHsaCP2506777	HEX	70
				dHsaMDV2516776	FAM + HEX	70
NRAS	p.G13D	COSM573	Chr1	dHsaCP2500526	FAM	70
				dHsaCP2500527	HEX	70
				dHsaMDV2510526	FAM + HEX	70
NRAS	p.G13R	COSM569	Chr1	dHsaCP2500534	FAM	70
				dHsaCP2500535	HEX	70
				dHsaMDV2510534	FAM + HEX	70
NRAS	p.G13V	COSM574	Chr1	dHsaCP2500524	FAM	70
				dHsaCP2500525	HEX	70
				dHsaMDV2510524	FAM + HEX	70
NRAS	p.Q61H	COSM585	Chr1	dHsaCP2000065	FAM	65
				dHsaCP2000066	HEX	65
				dHsaMDV2010065	FAM + HEX	65
NRAS	p.Q61H	COSM586	Chr1	dHsaCP2500578	FAM	65
				dHsaCP2500579	HEX	65
				dHsaMDV2510578	FAM + HEX	65
NRAS	p.Q61K	COSM580	Chr1	dHsaCP2000067	FAM	65
				dHsaCP2000068	HEX	65
				dHsaMDV2010067	FAM + HEX	65
NRAS	p.Q61L	COSM583	Chr1	dHsaCP2000069	FAM	65
				dHsaCP2000070	HEX	65
				dHsaMDV2010069	FAM + HEX	65
NRAS	p.Q61P	COSM582	Chr1	dHsaCP2506880	FAM	65
				dHsaCP2506881	HEX	65
				dHsaMDV2516880	FAM + HEX	65
NRAS	p.Q61R	COSM584	Chr1	dHsaCP2000071	FAM	65
				dHsaCP2000072	HEX	65
				dHsaMDV2010071	FAM + HEX	65
PDGFRA	p.D842V	COSM736	Chr4	dHsaCP2506894	FAM	67
				dHsaCP2506895	HEX	67
				dHsaMDV2516894	FAM + HEX	67



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
PIK3CA	p.E365K	COSM86044	Chr3	dHsaCP2500498	FAM	87
				dHsaCP2500499	HEX	87
				dHsaMDV2510498	FAM + HEX	87
PIK3CA	p.E542K	COSM760	Chr3	dHsaCP2000073	FAM	78
				dHsaCP2000074	HEX	78
				dHsaMDV2010073	FAM + HEX	78
PIK3CA	p.E545G	COSM764	Chr3	dHsaCP2500544	FAM	78
				dHsaCP2500545	HEX	78
				dHsaMDV2510544	FAM + HEX	78
PIK3CA	p.E545K	COSM763	Chr3	dHsaCP2000075	FAM	78
				dHsaCP2000076	HEX	78
				dHsaMDV2010075	FAM + HEX	78
PIK3CA	p.G1049R	COSM12597	Chr3	dHsaCP2500574	FAM	74
				dHsaCP2500575	HEX	74
				dHsaMDV2510574	FAM + HEX	74
PIK3CA	p.H1047L	COSM776	Chr3	dHsaCP2000123	FAM	74
				dHsaCP2000124	HEX	74
				dHsaMDV2010123	FAM + HEX	74
PIK3CA	p.H1047R	COSM775	Chr3	dHsaCP2000077	FAM	80
				dHsaCP2000078	HEX	80
				dHsaMDV2010077	FAM + HEX	80
PIK3CA	p.H1047Y	COSM774	Chr3	dHsaCP2506750	FAM	74
				dHsaCP2506751	HEX	74
				dHsaMDV2516750	FAM + HEX	74
PIK3CA	p.H1048R	COSM36289	Chr3	dHsaCP2500580	FAM	80
				dHsaCP2500581	HEX	80
				dHsaMDV2510580	FAM + HEX	80
PIK3CA	p.K111N	COSM27505	Chr3	dHsaCP2500582	FAM	96
				dHsaCP2500583	HEX	96
				dHsaMDV2510582	FAM + HEX	96
PIK3CA	p.M1043I	COSM29313	Chr3	dHsaCP2500494	FAM	74
				dHsaCP2500495	HEX	74
				dHsaMDV2510494	FAM + HEX	74
PIK3CA	p.M1043I	COSM773	Chr3	dHsaCP2506780	FAM	74
				dHsaCP2506781	HEX	74
				dHsaMDV2516780	FAM + HEX	74
PIK3CA	p.N345K	COSM754	Chr3	dHsaCP2506778	FAM	100
				dHsaCP2506779	HEX	100
				dHsaMDV2516778	FAM + HEX	100
PIK3CA	p.R88Q	COSM746	Chr3	dHsaCP2500558	FAM	70
				dHsaCP2500559	HEX	70
				dHsaMDV2510558	FAM + HEX	70
PIK3CA	p.T1025T	COSM21451	Chr3	dHsaCP2506782	FAM	68
				dHsaCP2506783	HEX	68
				dHsaMDV2516782	FAM + HEX	68
PTEN	p.R233*	COSM5154	Chr10	dHsaCP2506784	FAM	114
				dHsaCP2506785	HEX	114
				dHsaMDV2516784	FAM + HEX	114



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
RET	p.M918T	COSM965	Chr10	dHsaCP2506896	FAM	80
				dHsaCP2506897	HEX	80
				dHsaMDV2516896	FAM + HEX	80
STAT3	p.D661Y	COSM1155739	Chr17	dHsaCP2506756	FAM	70
				dHsaCP2506757	HEX	70
				dHsaMDV2516756	FAM + HEX	70
STK11	p.F354L	COSM21360	Chr19	dHsaCP2506868	FAM	62
				dHsaCP2506869	HEX	62
				dHsaMDV2516868	FAM + HEX	62
STK11	p.Q170*	COSM20943	Chr19	dHsaCP2506936	FAM	65
				dHsaCP2506937	HEX	65
				dHsaMDV2516936	FAM + HEX	65
TP53	p.A161T	COSM10739	Chr17	dHsaCP2506786	FAM	79
				dHsaCP2506787	HEX	79
				dHsaMDV2516786	FAM + HEX	79
TP53	p.C135Y	COSM10801	Chr17	dHsaCP2506788	FAM	65
				dHsaCP2506789	HEX	65
				dHsaMDV2516788	FAM + HEX	65
TP53	p.C141Y	COSM43708	Chr17	dHsaCP2506744	FAM	63
				dHsaCP2506745	HEX	63
				dHsaMDV2516744	FAM + HEX	63
TP53	p.C238Y	COSM11059	Chr17	dHsaCP2506850	FAM	63
				dHsaCP2506851	HEX	63
				dHsaMDV2516850	FAM + HEX	63
TP53	p.C242F	COSM10810	Chr17	dHsaCP2506926	FAM	68
				dHsaCP2506927	HEX	68
				dHsaMDV2516926	FAM + HEX	68
TP53	p.C242Y	COSM10646	Chr17	dHsaCP2506852	FAM	68
				dHsaCP2506853	HEX	68
				dHsaMDV2516852	FAM + HEX	68
TP53	p.E286K	COSM10726	Chr17	dHsaCP2506920	FAM	80
				dHsaCP2506921	HEX	80
				dHsaMDV2516920	FAM + HEX	80
TP53	p.E294*	COSM10856	Chr17	dHsaCP2506862	FAM	80
				dHsaCP2506863	HEX	80
				dHsaMDV2516862	FAM + HEX	80
TP53	p.G154V	COSM6815	Chr17	dHsaCP2506870	FAM	114
				dHsaCP2506871	HEX	114
				dHsaMDV2516870	FAM + HEX	114
TP53	p.G245C	COSM11081	Chr17	dHsaCP2506884	FAM	65
				dHsaCP2506885	HEX	65
				dHsaMDV2516884	FAM + HEX	65
TP53	p.G245D	COSM43606	Chr17	dHsaCP2500542	FAM	65
				dHsaCP2500543	HEX	65
				dHsaMDV2510542	FAM + HEX	65
TP53	p.G245S	COSM6932	Chr17	dHsaCP2506746	FAM	65
				dHsaCP2506747	HEX	65
				dHsaMDV2516746	FAM + HEX	65



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
TP53	p.G245V	COSM11196	Chr17	dHsaCP2500554	FAM	70
				dHsaCP2500555	HEX	70
				dHsaMDV2510554	FAM + HEX	70
TP53	p.G266E	COSM10867	Chr17	dHsaCP2506854	FAM	65
				dHsaCP2506855	HEX	65
				dHsaMDV2516854	FAM + HEX	65
TP53	p.H179R	COSM10889	Chr17	dHsaCP2000125	FAM	81
				dHsaCP2000126	HEX	81
				dHsaMDV2010125	FAM + HEX	81
TP53	p.H179Y	COSM43584	Chr17	dHsaCP2500520	FAM	81
				dHsaCP2500521	HEX	81
				dHsaMDV2510520	FAM + HEX	81
TP53	p.H179Y	COSM10768	Chr17	dHsaCP2500540	FAM	81
				dHsaCP2500541	HEX	81
				dHsaMDV2510540	FAM + HEX	81
TP53	p.H193L	COSM11066	Chr17	dHsaCP2506872	FAM	65
				dHsaCP2506873	HEX	65
				dHsaMDV2516872	FAM + HEX	65
TP53	p.H193R	COSM10742	Chr17	dHsaCP2506924	FAM	65
				dHsaCP2506925	HEX	65
				dHsaMDV2516924	FAM + HEX	65
TP53	p.I195T	COSM11089	Chr17	dHsaCP2506898	FAM	65
				dHsaCP2506899	HEX	65
				dHsaMDV2516898	FAM + HEX	65
TP53	p.M237I	COSM10834	Chr17	dHsaCP2506928	FAM	63
				dHsaCP2506929	HEX	63
				dHsaMDV2516928	FAM + HEX	63
TP53	p.P151S	COSM10905	Chr17	dHsaCP2500570	FAM	65
				dHsaCP2500571	HEX	65
				dHsaMDV2510570	FAM + HEX	65
TP53	p.P152L	COSM10790	Chr17	dHsaCP2506908	FAM	65
				dHsaCP2506909	HEX	65
				dHsaMDV2516908	FAM + HEX	65
TP53	p.P278L	COSM10863	Chr17	dHsaCP2506856	FAM	65
				dHsaCP2506857	HEX	65
				dHsaMDV2516856	FAM + HEX	65
TP53	p.P278S	COSM10939	Chr17	dHsaCP2506918	FAM	65
				dHsaCP2506919	HEX	65
				dHsaMDV2516918	FAM + HEX	65
TP53	p.Q192*	COSM10733	Chr17	dHsaCP2506904	FAM	65
				dHsaCP2506905	HEX	65
				dHsaMDV2516904	FAM + HEX	65
TP53	p.R158H	COSM10690	Chr17	dHsaCP2500522	FAM	62
				dHsaCP2500523	HEX	62
				dHsaMDV2510522	FAM + HEX	62
TP53	p.R175H	COSM10648	Chr17	dHsaCP2000105	FAM	65
				dHsaCP2000106	HEX	65
				dHsaMDV2010105	FAM + HEX	65



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
TP53	p.R175L	COSM10718	Chr17	dHsaCP2500518	FAM	65
				dHsaCP2500519	HEX	65
				dHsaMDV2510518	FAM + HEX	65
TP53	p.R196*	COSM10705	Chr17	dHsaCP2000121	FAM	65
				dHsaCP2000122	HEX	65
				dHsaMDV2010121	FAM + HEX	65
TP53	p.R213*	COSM10654	Chr17	dHsaCP2506810	FAM	63
				dHsaCP2506811	HEX	63
				dHsaMDV2516810	FAM + HEX	63
TP53	p.R248L	COSM6549	Chr17	dHsaCP2500502	FAM	62
				dHsaCP2500503	HEX	62
				dHsaMDV2510502	FAM + HEX	62
TP53	p.R248Q	COSM10662	Chr17	dHsaCP2000127	FAM	62
				dHsaCP2000128	HEX	62
				dHsaMDV2010127	FAM + HEX	62
TP53	p.R248W	COSM10656	Chr17	dHsaCP2000107	FAM	65
				dHsaCP2000108	HEX	65
				dHsaMDV2010107	FAM + HEX	65
TP53	p.R249S	COSM10817	Chr17	dHsaCP2000087	FAM	65
				dHsaCP2000088	HEX	65
				dHsaMDV2010087	FAM + HEX	65
TP53	p.R273C	COSM10659	Chr17	dHsaCP2500538	FAM	65
				dHsaCP2500539	HEX	65
				dHsaMDV2510538	FAM + HEX	65
TP53	p.R273H	COSM10660	Chr17	dHsaCP2000109	FAM	65
				dHsaCP2000110	HEX	65
				dHsaMDV2010109	FAM + HEX	65
TP53	p.R273L	COSM10779	Chr17	dHsaCP2500504	FAM	65
				dHsaCP2500505	HEX	65
				dHsaMDV2510504	FAM + HEX	65
TP53	p.R280T	COSM10724	Chr17	dHsaCP2506830	FAM	68
				dHsaCP2506831	HEX	68
				dHsaMDV2516830	FAM + HEX	68
TP53	p.R282W	COSM10704	Chr17	dHsaCP2506902	FAM	64
				dHsaCP2506903	HEX	64
				dHsaMDV2516902	FAM + HEX	64
TP53	p.R306*	COSM10663	Chr17	dHsaCP2500552	FAM	65
				dHsaCP2500553	HEX	65
				dHsaMDV2510552	FAM + HEX	65
TP53	p.R342*	COSM11073	Chr17	dHsaCP2506914	FAM	63
				dHsaCP2506915	HEX	63
				dHsaMDV2516914	FAM + HEX	63
TP53	p.S241F	COSM10812	Chr17	dHsaCP2506910	FAM	64
				dHsaCP2506911	HEX	64
				dHsaMDV2516910	FAM + HEX	64
TP53	p.V157F	COSM10670	Chr17	dHsaCP2000129	FAM	62
				dHsaCP2000130	HEX	62
				dHsaMDV2010129	FAM + HEX	62



Gene Name	Amino Acid Change	COSMIC_ID	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
TP53	p.V173M	COSM11084	Chr17	dHsaCP2500514	FAM	64
				dHsaCP2500515	HEX	64
				dHsaMDV2510514	FAM + HEX	64
TP53	p.V216M	COSM10667	Chr17	dHsaCP2506866	FAM	64
				dHsaCP2506867	HEX	64
				dHsaMDV2516866	FAM + HEX	64
TP53	p.V272M	COSM10891	Chr17	dHsaCP2506930	FAM	65
				dHsaCP2506931	HEX	65
				dHsaMDV2516930	FAM + HEX	65
TP53	p.W146*	COSM10727	Chr17	dHsaCP2506888	FAM	65
				dHsaCP2506889	HEX	65
				dHsaMDV2516888	FAM + HEX	65
TP53	p.Y163C	COSM10808	Chr17	dHsaCP2000099	FAM	79
				dHsaCP2000100	HEX	79
				dHsaMDV2010099	FAM + HEX	79
TP53	p.Y205C	COSM43947	Chr17	dHsaCP2506922	FAM	70
				dHsaCP2506923	HEX	70
				dHsaMDV2516922	FAM + HEX	70
TP53	p.Y220C	COSM10758	Chr17	dHsaCP2500536	FAM	64
				dHsaCP2500537	HEX	64
				dHsaMDV2510536	FAM + HEX	64
TP53	p.Y234C	COSM10725	Chr17	dHsaCP2506900	FAM	63
				dHsaCP2506901	HEX	63
				dHsaMDV2516900	FAM + HEX	63
TP53	p.Y236C	COSM10731	Chr17	dHsaCP2506916	FAM	68
				dHsaCP2506917	HEX	68
				dHsaMDV2516916	FAM + HEX	68



Copy Number Determination Assays

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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
ABCA1	Chr9	dHsaCP1000148	FAM	78
		dHsaCP2506947	HEX	78
ABCA7	Chr19	dHsaCP1000385	FAM	61
		dHsaCP2506948	HEX	61
ABCB1	Chr7	dHsaCP1000464	FAM	69
		dHsaCP2506949	HEX	69
ABCC9	Chr12	dHsaCP2500352	FAM	67
		dHsaCP2506567	HEX	67
ABCF2	Chr7	dHsaCP1000381	FAM	68
		dHsaCP2506950	HEX	68
ABCG1	Chr21	dHsaCP1000136	FAM	70
		dHsaCP2506951	HEX	70
ABCG4	Chr11	dHsaCP1000157	FAM	61
		dHsaCP2506952	HEX	61
ABL1	Chr9	dHsaCP1000587	FAM	64
		dHsaCP2506490	HEX	64
ACAT2	Chr6	dHsaCP2500353	FAM	68
		dHsaCP2506568	HEX	68
ACAT2	Chr6	dHsaCP1000223	FAM	90
		dHsaCP2506953	HEX	90
ACE	Chr17	dHsaCP1000135	FAM	66
		dHsaCP2506954	HEX	66
ACTA2	Chr10	dHsaCP1000421	FAM	67
		dHsaCP2506955	HEX	67
ACTN4	Chr19	dHsaCP1000457	FAM	69
		dHsaCP2506956	HEX	69
ADAM12	Chr10	dHsaCP1000190	FAM	70
		dHsaCP2506957	HEX	70
ADAM23	Chr2	dHsaCP1000433	FAM	70
		dHsaCP2506958	HEX	70
ADAM3A	Chr8	dHsaCP1000370	FAM	176
		dHsaCP2506959	HEX	176
ADAM3A	Chr8	dHsaCP2500347	FAM	78
		dHsaCP2506534	HEX	78
ADSL	Chr22	dHsaCP1000553	FAM	69
		dHsaCP2506408	HEX	69
AGAP1	Chr2	dHsaCP1000554	FAM	61
		dHsaCP2506409	HEX	61
AGMO	Chr7	dHsaCP1000555	FAM	70
		dHsaCP2506410	HEX	70
AHI1	Chr6	dHsaCP1000556	FAM	69
		dHsaCP2506411	HEX	69
AKAP5	Chr14	dHsaCP1000522	FAM	68
		dHsaCP2506329	HEX	68
AKT1	Chr14	dHsaCP1000364	FAM	172
		dHsaCP2506960	HEX	172
AKT1	Chr14	dHsaCP2500336	FAM	60
		dHsaCP2506491	HEX	60



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
AKT2	Chr19	dHsaCP1000418	FAM	70
		dHsaCP2506961	HEX	70
AKT3	Chr1	dHsaCP2500354	FAM	67
		dHsaCP2506569	HEX	67
ALDH1B1	Centromeric 9p assay (9p13.2)	dHsaCP2506303	FAM	70
		dHsaCP2506705	HEX	70
ALK	Chr2	dHsaCP1000588	FAM	64
		dHsaCP2506492	HEX	64
AMY1A	Chr1	dHsaCP1000594	FAM	85
		dHsaCP1000594	FAM	85
AMY1A	Chr1	dHsaCP1000594	FAM	85
		dHsaCP2506537	HEX	85
AMY1A	Chr1	dHsaCP2506537	HEX	85
		dHsaCP2506537	HEX	85
ANK1	Centromeric 8p assay (8p11.21)	dHsaCP2506264	FAM	65
		dHsaCP2506686	HEX	65
ANK3	Chr10	dHsaCP1000215	FAM	77
		dHsaCP2506962	HEX	77
ANKRD11	Chr16	dHsaCP1000523	FAM	65
		dHsaCP2506330	HEX	65
ANKRD12	Chr18	dHsaCP1000557	FAM	69
		dHsaCP2506412	HEX	69
ANKRD30A	Centromeric 10p assay (10p11.21)	dHsaCP2506265	FAM	68
		dHsaCP2506687	HEX	68
ANKRD30B	Centromeric 18p assay (18p11.21)	dHsaCP2506266	FAM	64
		dHsaCP2506688	HEX	64
AOAH	Chr7	dHsaCP1000105	FAM	64
		dHsaCP2506963	HEX	64
AP3B1	Chr5	dHsaCP2500315	FAM	60
		dHsaCP2500348	HEX	60
AP3B1	Chr5	dHsaCP1000483	FAM	85
		dHsaCP1000001	HEX	85
APBA2	Chr15	dHsaCP1000524	FAM	68
		dHsaCP2506331	HEX	68
APBB2	Chr4	dHsaCP1000144	FAM	71
		dHsaCP2506964	HEX	71
APC	Chr5	dHsaCP2500356	FAM	66
		dHsaCP2506570	HEX	66
APOA1BP	Chr1	dHsaCP1000142	FAM	68
		dHsaCP2506965	HEX	68
APOBEC3G	Chr22	dHsaCP2500357	FAM	69
		dHsaCP2506672	HEX	69
APOC1	Chr19	dHsaCP1000456	FAM	69
		dHsaCP2506966	HEX	69
APP	Chr21	dHsaCP2500358	FAM	66
		dHsaCP2506571	HEX	66
AR	ChrX	dHsaCP2500359	FAM	70
		dHsaCP2506572	HEX	70



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<i>ARHGEF10</i>	Chr8	dHsaCP1000416	FAM	66
		dHsaCP2506967	HEX	66
<i>ARHGEF9</i>	Centromeric Xq assay (Xq11.1)	dHsaCP2506327	FAM	66
		dHsaCP2506706	HEX	66
<i>ARID1A</i>	Chr1	dHsaCP2500360	FAM	63
		dHsaCP2506542	HEX	63
<i>ARID5B</i>	Chr10	dHsaCP1000201	FAM	76
		dHsaCP2506968	HEX	76
<i>ARL13B</i>	Centromeric 3q assay (3q11.1)	dHsaCP2506267	FAM	70
		dHsaCP2506677	HEX	70
<i>ARPC1A</i>	Chr7	dHsaCP2500346	FAM	69
		dHsaCP2506493	HEX	69
<i>ARSA</i>	Chr22	dHsaCP2500361	FAM	65
		dHsaCP2506646	HEX	65
<i>ASL</i>	Centromeric 7q assay (7q11.21)	dHsaCP2506268	FAM	70
		dHsaCP2506678	HEX	70
<i>ASTN1</i>	Chr1	dHsaCP1000558	FAM	70
		dHsaCP2506413	HEX	70
<i>ASTN2</i>	Chr9	dHsaCP1000525	FAM	64
		dHsaCP2506332	HEX	64
<i>ASXL1</i>	Chr20	dHsaCP1000514	FAM	64
		dHsaCP2506333	HEX	64
<i>ATAD2</i>	Chr8	dHsaCP1000130	FAM	70
		dHsaCP2506969	HEX	70
<i>ATM</i>	Chr11	dHsaCP2500362	FAM	70
		dHsaCP2506543	HEX	70
<i>ATM</i>	Chr11	dHsaCP1000006	FAM	116
		dHsaCP2506970	HEX	116
<i>ATP7B</i>	Chr13	dHsaCP1000448	FAM	70
		dHsaCP2506971	HEX	70
<i>ATRX</i>	ChrX	dHsaCP1000559	FAM	67
		dHsaCP2506414	HEX	67
<i>ATXN1</i>	Chr6	dHsaCP1000451	FAM	70
		dHsaCP2506972	HEX	70
<i>AUTS2</i>	Chr7	dHsaCP1000560	FAM	61
		dHsaCP2506415	HEX	61
<i>B3GALT6</i>	Chr1	dHsaCP1000561	FAM	65
		dHsaCP2506416	HEX	65
<i>B3GNTL1</i>	Chr17	dHsaCP2500363	FAM	69
		dHsaCP2506669	HEX	69
<i>BACE1</i>	Chr11	dHsaCP1000169	FAM	68
		dHsaCP2506973	HEX	68
<i>BACE2</i>	Chr21	dHsaCP1000217	FAM	78
		dHsaCP2506974	HEX	78
<i>BAG2</i>	Chr6	dHsaCP2500331	FAM	69
		dHsaCP2506494	HEX	69
<i>BBC3</i>	Chr19	dHsaCP1000300	FAM	74
		dHsaCP2506975	HEX	74



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<i>BCHE</i>	Chr3	dHsaCP2500333	FAM	70
		dHsaCP2506495	HEX	70
<i>BCL2L1</i>	Chr20	dHsaCP1000156	FAM	65
		dHsaCP2506976	HEX	65
<i>BCL2L2</i>	Chr14	dHsaCP2500364	FAM	65
		dHsaCP2506573	HEX	65
<i>BDNF</i>	Chr11	dHsaCP1000160	FAM	68
		dHsaCP2506977	HEX	68
<i>BIN1</i>	Chr2	dHsaCP1000110	FAM	69
		dHsaCP2506978	HEX	69
<i>BIRC2</i>	Chr11	dHsaCP2500365	FAM	68
		dHsaCP2506544	HEX	68
<i>BRAF</i>	Chr7	dHsaCP2500366	FAM	66
		dHsaCP2506666	HEX	66
<i>BRCA1</i>	Chr17	dHsaCP2500367	FAM	63
		dHsaCP2506574	HEX	63
<i>BRCA1</i>	Chr17	dHsaCP1000008	FAM	82
		dHsaCP2506979	HEX	82
<i>BRCA2</i>	Chr13	dHsaCP1000009	FAM	119
		dHsaCP2506980	HEX	119
<i>BRCA2</i>	Chr13	dHsaCP2500368	FAM	70
		dHsaCP2506545	HEX	70
<i>C11orf30</i>	Chr11	dHsaCP1000134	FAM	63
		dHsaCP2506981	HEX	63
<i>C3orf58</i>	Chr3	dHsaCP1000562	FAM	57
		dHsaCP2506417	HEX	57
<i>C8orf4</i>	Chr8	dHsaCP1000161	FAM	70
		dHsaCP2506982	HEX	70
<i>C9orf66</i>	Chr9	dHsaCP2500340	FAM	68
		dHsaCP2506496	HEX	68
<i>CACNA1C</i>	Chr12	dHsaCP1000563	FAM	66
		dHsaCP2506418	HEX	66
<i>CACNG2</i>	Chr22	dHsaCP1000526	FAM	64
		dHsaCP2506334	HEX	64
<i>CAND1</i>	Chr12	dHsaCP1000429	FAM	77
		dHsaCP2506983	HEX	77
<i>CAP2</i>	Chr6	dHsaCP1000564	FAM	65
		dHsaCP2506419	HEX	65
<i>CARD8</i>	Chr19	dHsaCP2500369	FAM	63
		dHsaCP2506575	HEX	63
<i>CBL</i>	Chr11	dHsaCP1000516	FAM	68
		dHsaCP2506335	HEX	68
<i>CBLC</i>	Chr19	dHsaCP2500370	FAM	70
		dHsaCP2506576	HEX	70
<i>CCDC134</i>	Chr22	dHsaCP1000407	FAM	64
		dHsaCP2506984	HEX	64
<i>CCL3</i>	Chr17	dHsaCP1000354	FAM	153
		dHsaCP2506985	HEX	153



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CCND1	Chr11	dHsaCP2500371	FAM	64
		dHsaCP2506546	HEX	64
CCND1	Chr11	dHsaCP1000010	FAM	104
		dHsaCP2506986	HEX	104
CCND2	Chr12	dHsaCP1000011	FAM	73
		dHsaCP2506987	HEX	73
CCND3	Chr6	dHsaCP2500345	FAM	69
		dHsaCP2506497	HEX	69
CCNE1	Chr19	dHsaCP2500372	FAM	68
		dHsaCP2506547	HEX	68
CCNE1	Chr19	dHsaCP1000012	FAM	110
		dHsaCP2506988	HEX	110
CCNT1	Chr12	dHsaCP1000454	FAM	79
		dHsaCP2506989	HEX	79
CCR5	Chr3	dHsaCP1000295	FAM	80
		dHsaCP2506990	HEX	80
CD160	Centromeric 1q assay (1q21.1)	dHsaCP2506269	FAM	69
		dHsaCP2506689	HEX	69
CD320	Chr19	dHsaCP1000527	FAM	70
		dHsaCP2506336	HEX	70
CD33	Chr19	dHsaCP1000350	FAM	108
		dHsaCP2506991	HEX	108
CD36	Chr7	dHsaCP1000101	FAM	67
		dHsaCP2506992	HEX	67
CD44	Chr11	dHsaCP1000292	FAM	76
		dHsaCP2506993	HEX	76
CD52	Chr1	dHsaCP2500373	FAM	65
		dHsaCP2506656	HEX	65
CDC42	Chr1	dHsaCP1000340	FAM	198
		dHsaCP2506994	HEX	198
CDH1	Chr16	dHsaCP1000585	FAM	67
		dHsaCP2506498	HEX	67
CDH10	Chr5	dHsaCP1000565	FAM	61
		dHsaCP2506420	HEX	61
CDH18	Chr5	dHsaCP1000566	FAM	67
		dHsaCP2506421	HEX	67
CDH9	Chr5	dHsaCP1000567	FAM	67
		dHsaCP2506422	HEX	67
CDK4	Chr12	dHsaCP2500374	FAM	63
		dHsaCP2506548	HEX	63
CDK5	Chr7	dHsaCP1000147	FAM	70
		dHsaCP2506995	HEX	70
CDK6	Chr7	dHsaCP1000014	FAM	75
		dHsaCP2506996	HEX	75
CDKL5	ChrX	dHsaCP1000568	FAM	64
		dHsaCP2506423	HEX	64
CDKN1A	Chr6	dHsaCP2500375	FAM	62
		dHsaCP2506577	HEX	62



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<i>CDKN2A</i>	Chr9	dHsaCP1000581	FAM	66
		dHsaCP2506499	HEX	66
<i>CDKN2B</i>	Chr9	dHsaCP1000121	FAM	60
		dHsaCP2506997	HEX	60
<i>CDKN2C</i>	Chr1	dHsaCP1000589	FAM	66
		dHsaCP2506500	HEX	66
<i>CEACAM6</i>	Chr19	dHsaCP1000343	FAM	126
		dHsaCP2506998	HEX	126
<i>CEBPA</i>	Chr19	dHsaCP1000494	FAM	62
		dHsaCP2506337	HEX	62
<i>CEBPD</i>	Centromeric 8q assay (8q11.21)	dHsaCP2506270	FAM	61
		dHsaCP2506690	HEX	61
<i>CELF2</i>	Chr10	dHsaCP2500376	FAM	70
		dHsaCP2506578	HEX	70
<i>CETP</i>	Chr16	dHsaCP1000397	FAM	66
		dHsaCP2506999	HEX	66
<i>CH25H</i>	Chr10	dHsaCP2500377	FAM	68
		dHsaCP2506579	HEX	68
<i>CHAT</i>	Chr10	dHsaCP1000387	FAM	68
		dHsaCP2507000	HEX	68
<i>CHD5</i>	Chr1	dHsaCP1000436	FAM	66
		dHsaCP2507001	HEX	66
<i>CHD7</i>	Chr8	dHsaCP1000529	FAM	69
		dHsaCP2506371	HEX	69
<i>CHMP2B</i>	Chr3	dHsaCP2500330	FAM	70
		dHsaCP2506501	HEX	70
<i>ChrNA2</i>	Chr8	dHsaCP1000284	FAM	78
		dHsaCP2507002	HEX	78
<i>ChrNA6</i>	Chr8	dHsaCP1000211	FAM	75
		dHsaCP2507003	HEX	75
<i>ChrNA7</i>	Chr15	dHsaCP1000530	FAM	58
		dHsaCP2506372	HEX	58
<i>ChrNB2</i>	Chr1	dHsaCP1000138	FAM	65
		dHsaCP2507004	HEX	65
<i>ChrNB4</i>	Chr15	dHsaCP1000438	FAM	60
		dHsaCP2507005	HEX	60
<i>CLPTM1</i>	Chr19	dHsaCP1000417	FAM	64
		dHsaCP2507006	HEX	64
<i>CLU</i>	Chr8	dHsaCP1000445	FAM	68
		dHsaCP2507007	HEX	68
<i>CLVS1</i>	Chr8	dHsaCP1000309	FAM	73
		dHsaCP2507008	HEX	73
<i>CNTN3</i>	Chr3	dHsaCP1000569	FAM	62
		dHsaCP2506424	HEX	62
<i>CNTN4</i>	Chr3	dHsaCP1000531	FAM	70
		dHsaCP2506373	HEX	70
<i>CNTNAP2</i>	Chr7	dHsaCP1000532	FAM	67
		dHsaCP2506374	HEX	67



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<i>CR1</i>	Chr1	dHsaCP1000184	FAM	68
		dHsaCP2507009	HEX	68
<i>CRCP</i>	Centromeric 7q assay (7q11.21)	dHsaCP2506271	FAM	63
		dHsaCP2506679	HEX	63
<i>CREBBP</i>	Chr16	dHsaCP1000570	FAM	69
		dHsaCP2506425	HEX	69
<i>CRKL</i>	Chr22	dHsaCP2500378	FAM	63
		dHsaCP2506549	HEX	63
<i>CRMP1</i>	Chr4	dHsaCP1000298	FAM	73
		dHsaCP2507010	HEX	73
<i>CSF1R</i>	Chr5	dHsaCP1000495	FAM	64
		dHsaCP2506338	HEX	64
<i>CSK</i>	Chr15	dHsaCP2500379	FAM	60
		dHsaCP2506580	HEX	60
<i>CSMD1</i>	Chr8	dHsaCP2500380	FAM	66
		dHsaCP2506581	HEX	66
<i>CTLA4</i>	Chr2	dHsaCP2500381	FAM	68
		dHsaCP2506657	HEX	68
<i>CTNNB1</i>	Chr3	dHsaCP2500382	FAM	67
		dHsaCP2506582	HEX	67
<i>CTNND1</i>	Chr11	dHsaCP1000182	FAM	68
		dHsaCP2507011	HEX	68
<i>CTNND2</i>	Chr5	dHsaCP1000533	FAM	64
		dHsaCP2506375	HEX	64
<i>CTSD</i>	Chr11	dHsaCP1000439	FAM	65
		dHsaCP2507012	HEX	65
<i>CTSZ</i>	Chr20	dHsaCP1000411	FAM	68
		dHsaCP2507013	HEX	68
<i>CXCL10</i>	Chr4	dHsaCP2500383	FAM	69
		dHsaCP2506583	HEX	69
<i>CYFIP1</i>	Chr15	dHsaCP1000386	FAM	67
		dHsaCP2507014	HEX	67
<i>CYP19A1</i>	Chr15	dHsaCP1000210	FAM	72
		dHsaCP2507015	HEX	72
<i>CYP2D6</i>	Chr22	dHsaCP2506740	FAM	107
		dHsaCP2506741	HEX	107
<i>DAPK1</i>	Chr9	dHsaCP1000195	FAM	69
		dHsaCP2507016	HEX	69
<i>DCC</i>	Chr18	dHsaCP1000172	FAM	69
		dHsaCP2507017	HEX	69
<i>DCUN1D1</i>	Chr3	dHsaCP1000018	FAM	79
		dHsaCP2507018	HEX	79
<i>DCUN1D4</i>	Centromeric 4q assay (4q12)	dHsaCP2506300	FAM	70
		dHsaCP2506707	HEX	70
<i>DDR2</i>	Chr1	dHsaCP2500384	FAM	65
		dHsaCP2506658	HEX	65
<i>DEFB119</i>	Chr20	dHsaCP2500385	FAM	70
		dHsaCP2506550	HEX	70



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<i>DERL1</i>	Chr8	dHsaCP1000304	FAM	76
		dHsaCP2507019	HEX	76
<i>DGKB</i>	Chr7	dHsaCP1000106	FAM	70
		dHsaCP2507020	HEX	70
<i>DHCR24</i>	Chr1	dHsaCP1000435	FAM	70
		dHsaCP2507021	HEX	70
<i>DHCR7</i>	Chr11	dHsaCP1000571	FAM	65
		dHsaCP2506426	HEX	65
<i>DISC1</i>	Chr1	dHsaCP1000572	FAM	64
		dHsaCP2506427	HEX	64
<i>DLGAP2</i>	Chr8	dHsaCP1000573	FAM	69
		dHsaCP2506428	HEX	69
<i>DLL3</i>	Chr19	dHsaCP2500386	FAM	67
		dHsaCP2506584	HEX	67
<i>DLST</i>	Chr14	dHsaCP1000440	FAM	67
		dHsaCP2507022	HEX	67
<i>DMD</i>	ChrX	dHsaCP1000574	FAM	70
		dHsaCP2506429	HEX	70
<i>DNM2</i>	Chr19	dHsaCP1000394	FAM	66
		dHsaCP2507023	HEX	66
<i>DNMBP</i>	Chr10	dHsaCP1000235	FAM	87
		dHsaCP2507024	HEX	87
<i>DNMT3B</i>	Chr20	dHsaCP1000399	FAM	70
		dHsaCP2507025	HEX	70
<i>DOPEY2</i>	Chr21	dHsaCP1000534	FAM	59
		dHsaCP2506376	HEX	59
<i>DPP10</i>	Chr2	dHsaCP1000575	FAM	65
		dHsaCP2506430	HEX	65
<i>DPP6</i>	Chr7	dHsaCP1000576	FAM	60
		dHsaCP2506431	HEX	60
<i>DPYD</i>	Chr1	dHsaCP1000577	FAM	62
		dHsaCP2506432	HEX	62
<i>DPYS</i>	Chr8	dHsaCP1000120	FAM	68
		dHsaCP2507026	HEX	68
<i>DSC1</i>	Chr18	dHsaCP2500387	FAM	69
		dHsaCP2506585	HEX	69
<i>DST</i>	Centromeric 6p assay (6p12.1)	dHsaCP2506302	FAM	67
		dHsaCP2506708	HEX	67
<i>DUSP6</i>	Chr12	dHsaCP1000112	FAM	70
		dHsaCP2507027	HEX	70
<i>DYRK1A</i>	Chr21	dHsaCP1000132	FAM	70
		dHsaCP2507028	HEX	70
<i>E2F1</i>	Chr20	dHsaCP1000299	FAM	80
		dHsaCP2507029	HEX	80
<i>E2F1</i>	Chr20	dHsaCP2506586	HEX	66
		dHsaCP2500388	FAM	66
<i>E2F3</i>	Chr6	dHsaCP2500389	FAM	70
		dHsaCP2506551	HEX	70



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<i>EBF3</i>	Chr10	dHsaCP2500390	FAM	70
		dHsaCP2506587	HEX	70
<i>EEF1A2</i>	Chr20	dHsaCP1000412	FAM	65
		dHsaCP2507030	HEX	65
<i>EFNA5</i>	Chr5	dHsaCP1000166	FAM	70
		dHsaCP2507031	HEX	70
<i>EGFR</i>	Chr7	dHsaCP1000020	FAM	88
		dHsaCP2507032	HEX	88
<i>EGFR</i>	Chr7	dHsaCP2500318	FAM	64
		dHsaCP2506502	HEX	64
<i>EGR1</i>	Chr5	dHsaCP2500391	FAM	61
		dHsaCP2506675	HEX	61
<i>EIF2AK2</i>	Chr2	dHsaCP2500392	FAM	70
		dHsaCP2506588	HEX	70
<i>EIF2C1</i>	Chr1	dHsaCP2500316	FAM	69
		dHsaCP2500349	HEX	69
<i>EIF2C1</i>	Chr1	dHsaCP1000484	FAM	86
		dHsaCP1000002	HEX	86
<i>ELN</i>	Chr7	dHsaCP2500393	FAM	65
		dHsaCP2506647	HEX	65
<i>ENTPD6</i>	Centromeric 20p assay (20p11.21)	dHsaCP2506317	FAM	65
		dHsaCP2506709	HEX	65
<i>ENTPD7</i>	Chr10	dHsaCP1000179	FAM	69
		dHsaCP2507033	HEX	69
<i>EPC2</i>	Chr2	dHsaCP1000103	FAM	66
		dHsaCP2507034	HEX	66
<i>EPHA3</i>	Centromeric 3p assay (3p11.1)	dHsaCP2506272	FAM	70
		dHsaCP2506680	HEX	70
<i>EPHA4</i>	Chr2	dHsaCP1000434	FAM	64
		dHsaCP2507035	HEX	64
<i>EPHA6</i>	Chr3	dHsaCP2500394	FAM	64
		dHsaCP2506589	HEX	64
<i>ERBB2</i>	Chr17	dHsaCP1000116	FAM	66
		dHsaCP2507036	HEX	66
<i>ERBB3</i>	Chr12	dHsaCP2500395	FAM	67
		dHsaCP2506590	HEX	67
<i>ERBB3</i>	Chr12	dHsaCP1000021	FAM	93
		dHsaCP2507037	HEX	93
<i>ERBB4</i>	Chr2	dHsaCP1000535	FAM	66
		dHsaCP2506377	HEX	66
<i>ERG</i>	Chr21	dHsaCP1000133	FAM	65
		dHsaCP2507038	HEX	65
<i>ERMP1</i>	Chr9	dHsaCP1000405	FAM	67
		dHsaCP2507039	HEX	67
<i>ESR1</i>	Chr6	dHsaCP1000403	FAM	66
		dHsaCP2507040	HEX	66
<i>ETS2</i>	Chr21	dHsaCP1000191	FAM	70
		dHsaCP2507041	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>EZH2</i>	Chr7	dHsaCP1000508	FAM	69
		dHsaCP2506339	HEX	69
<i>F11R</i>	Chr1	dHsaCP2500396	FAM	66
		dHsaCP2506591	HEX	66
<i>FADD</i>	Chr11	dHsaCP2500337	FAM	69
		dHsaCP2506503	HEX	69
<i>FADD</i>	Chr11	dHsaCP1000477	FAM	166
		dHsaCP2507042	HEX	166
<i>FAM84B</i>	Chr8	dHsaCP2500325	FAM	67
		dHsaCP2506504	HEX	67
<i>FBXW7</i>	Chr4	dHsaCP1000426	FAM	68
		dHsaCP2507043	HEX	68
<i>FEZ1</i>	Chr11	dHsaCP2500397	FAM	70
		dHsaCP2506592	HEX	70
<i>FGD1</i>	ChrX	dHsaCP1000578	FAM	65
		dHsaCP2506433	HEX	65
<i>FGF19</i>	Chr11	dHsaCP1000580	FAM	68
		dHsaCP2506505	HEX	68
<i>FGFR1</i>	Chr8	dHsaCP1000022	FAM	79
		dHsaCP2507044	HEX	79
<i>FGFR1</i>	Chr8	dHsaCP2500319	FAM	69
		dHsaCP2506506	HEX	69
<i>FGFR2</i>	Chr10	dHsaCP2500320	FAM	63
		dHsaCP2506507	HEX	63
<i>FGFR2</i>	Chr10	dHsaCP1000023	FAM	91
		dHsaCP2507045	HEX	91
<i>FGFR3</i>	Chr4	dHsaCP1000503	FAM	69
		dHsaCP2506340	HEX	69
<i>FGR</i>	Chr1	dHsaCP2500398	FAM	67
		dHsaCP2506593	HEX	67
<i>FHIT</i>	Chr3	dHsaCP2500399	FAM	65
		dHsaCP2506594	HEX	65
<i>FLT1</i>	Chr13	dHsaCP2500400	FAM	68
		dHsaCP2506659	HEX	68
<i>FLT3</i>	Chr13	dHsaCP1000582	FAM	69
		dHsaCP2506508	HEX	69
<i>FLT4</i>	Chr5	dHsaCP2500401	FAM	67
		dHsaCP2506660	HEX	67
<i>FMR1</i>	ChrX	dHsaCP1000536	FAM	69
		dHsaCP2506378	HEX	69
<i>FOXC2</i>	Chr16	dHsaCP1000537	FAM	59
		dHsaCP2506379	HEX	59
<i>FOXF1</i>	Chr16	dHsaCP2500246	FAM	55
		dHsaCP2506380	HEX	55
<i>FOXG1</i>	Chr14	dHsaCP2500247	FAM	61
		dHsaCP2506381	HEX	61
<i>FOXP3</i>	Chr2	dHsaCP2506273	FAM	62
		dHsaCP2506739	HEX	62



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FOXL2	Chr3	dHsaCP1000513	FAM	63
		dHsaCP2506341	HEX	63
FOXO1	Chr13	dHsaCP2500402	FAM	65
		dHsaCP2506595	HEX	65
FRYL	Centromeric 4p assay (4p11)	dHsaCP2506298	FAM	68
		dHsaCP2506710	HEX	68
FYN	Chr6	dHsaCP2500344	FAM	66
		dHsaCP2506509	HEX	66
G6PD	ChrX	dHsaCP1000137	FAM	67
		dHsaCP2507046	HEX	67
GAB2	Chr11	dHsaCP1000025	FAM	79
		dHsaCP2507047	HEX	79
GABRA5	Chr15	dHsaCP2500274	FAM	70
		dHsaCP2506451	HEX	70
GABRB1	Chr4	dHsaCP2500275	FAM	62
		dHsaCP2506452	HEX	62
GABRB3	Chr15	dHsaCP2500276	FAM	70
		dHsaCP2506453	HEX	70
GABRG1	Chr4	dHsaCP2500277	FAM	68
		dHsaCP2506454	HEX	68
GALNT11	Chr7	dHsaCP2500248	FAM	70
		dHsaCP2506382	HEX	70
GALNT13	Chr2	dHsaCP2500278	FAM	70
		dHsaCP2506455	HEX	70
GAPDHS	Chr19	dHsaCP2500403	FAM	66
		dHsaCP2506596	HEX	66
GATA1	ChrX	dHsaCP1000496	FAM	70
		dHsaCP2506342	HEX	70
GATA2	Chr3	dHsaCP1000497	FAM	70
		dHsaCP2506343	HEX	70
GATA4	Chr8	dHsaCP2500249	FAM	69
		dHsaCP2506383	HEX	69
GATA6	Chr18	dHsaCP2500339	FAM	68
		dHsaCP2506510	HEX	68
GHR	Chr5	dHsaCP2506274	FAM	68
		dHsaCP2506691	HEX	68
GIMD1	Chr4	dHsaCP2506275	FAM	70
		dHsaCP2506692	HEX	70
GINS1	Centromeric 20p assay (20p11.21)	dHsaCP2506318	FAM	70
		dHsaCP2506711	HEX	70
GJA3	Centromeric 13q assay (13q12.11)	dHsaCP2506308	FAM	57
		dHsaCP2506712	HEX	57
GLIS3	Chr9	dHsaCP1000420	FAM	78
		dHsaCP2507048	HEX	78
GLO1	Chr6	dHsaCP2500329	FAM	70
		dHsaCP2506511	HEX	70
GLOD4	Chr17	dHsaCP1000154	FAM	70
		dHsaCP2507049	HEX	70



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GNAQ	Chr9	dHsaCP1000504	FAM	69
		dHsaCP2506344	HEX	69
GNAS	Chr20	dHsaCP1000398	FAM	63
		dHsaCP2507050	HEX	63
GOLM1	Chr9	dHsaCP1000470	FAM	70
		dHsaCP2507051	HEX	70
GOT1	Chr10	dHsaCP1000442	FAM	60
		dHsaCP2507052	HEX	60
GPC5	Chr13	dHsaCP2500332	FAM	67
		dHsaCP2506512	HEX	67
GRB2	Chr17	dHsaCP2500324	FAM	68
		dHsaCP2506513	HEX	68
GREB1L	Centromeric 18q assay (18q11.1)	dHsaCP2506276	FAM	70
		dHsaCP2506693	HEX	70
GRID1	Chr10	dHsaCP2500279	FAM	69
		dHsaCP2506456	HEX	69
GRIK2	Chr6	dHsaCP2500280	FAM	70
		dHsaCP2506457	HEX	70
GRIN2B	Chr12	dHsaCP1000124	FAM	70
		dHsaCP2507053	HEX	70
GRM1	Chr6	dHsaCP1000125	FAM	61
		dHsaCP2507054	HEX	61
GRM7	Chr3	dHsaCP2500250	FAM	69
		dHsaCP2506384	HEX	69
GRM8	Chr7	dHsaCP2500281	FAM	70
		dHsaCP2506458	HEX	70
GRN	Chr17	dHsaCP1000380	FAM	63
		dHsaCP2507055	HEX	63
GRPR	ChrX	dHsaCP2500282	FAM	65
		dHsaCP2506459	HEX	65
GSTO2	Chr10	dHsaCP2500404	FAM	70
		dHsaCP2506597	HEX	70
GSTT1	Chr22	dHsaCP2500312	FAM	65
		dHsaCP2506460	HEX	65
GSTZ1	Chr14	dHsaCP1000465	FAM	67
		dHsaCP2507056	HEX	67
HACE1	Chr6	dHsaCP1000396	FAM	70
		dHsaCP2507057	HEX	70
HAO2	Centromeric 1p assay (1p12)	dHsaCP2506296	FAM	67
		dHsaCP2506713	HEX	67
HCN1	Centromeric 5p assay (5p12)	dHsaCP2506277	FAM	70
		dHsaCP2506694	HEX	70
HEY2	Chr6	dHsaCP1000102	FAM	60
		dHsaCP2507058	HEX	60
HFE	Chr6	dHsaCP2500405	FAM	65
		dHsaCP2506598	HEX	65
HGF	Chr7	dHsaCP2500406	FAM	70
		dHsaCP2506645	HEX	70



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<i>HIP1</i>	Chr7	dHsaCP1000584	FAM	63
		dHsaCP2506514	HEX	63
<i>HIPK2</i>	Chr7	dHsaCP1000384	FAM	67
		dHsaCP2507059	HEX	67
<i>HIRA</i>	Chr22	dHsaCP2500407	FAM	65
		dHsaCP2506648	HEX	65
<i>HK1</i>	Chr10	dHsaCP1000128	FAM	67
		dHsaCP2507060	HEX	67
<i>HLA-DPB1</i>	Chr6	dHsaCP2500251	FAM	69
		dHsaCP2506385	HEX	69
<i>HMGA2</i>	Chr12	dHsaCP2500408	FAM	68
		dHsaCP2506599	HEX	68
<i>HMGR</i>	Chr5	dHsaCP1000430	FAM	65
		dHsaCP2507061	HEX	65
<i>HMGCS1</i>	Chr5	dHsaCP1000206	FAM	79
		dHsaCP2507062	HEX	79
<i>HMGCS2</i>	Chr1	dHsaCP1000208	FAM	76
		dHsaCP2507063	HEX	76
<i>HMOX2</i>	Chr16	dHsaCP1000204	FAM	76
		dHsaCP2507064	HEX	76
<i>HNF1A</i>	Chr12	dHsaCP1000512	FAM	67
		dHsaCP2506345	HEX	67
<i>HNF1B</i>	Chr17	dHsaCP2500252	FAM	69
		dHsaCP2506386	HEX	69
<i>HRAS</i>	Chr11	dHsaCP1000492	FAM	67
		dHsaCP2506346	HEX	67
<i>HSD17B10</i>	ChrX	dHsaCP2500253	FAM	68
		dHsaCP2506387	HEX	68
<i>HTR2A</i>	Chr13	dHsaCP1000413	FAM	67
		dHsaCP2507065	HEX	67
<i>HUWE1</i>	ChrX	dHsaCP2500254	FAM	69
		dHsaCP2506388	HEX	69
<i>ID1</i>	Centromeric 20q assay (20q11.21)	dHsaCP2506319	FAM	69
		dHsaCP2506714	HEX	69
<i>IDE</i>	Chr10	dHsaCP1000441	FAM	68
		dHsaCP2507066	HEX	68
<i>IDH1</i>	Chr2	dHsaCP1000498	FAM	70
		dHsaCP2506347	HEX	70
<i>IDH2</i>	Chr15	dHsaCP1000499	FAM	64
		dHsaCP2506348	HEX	64
<i>IGF1R</i>	Chr15	dHsaCP2500409	FAM	70
		dHsaCP2506600	HEX	70
<i>IGF2</i>	Chr11	dHsaCP2506278	FAM	60
		dHsaCP2506676	HEX	60
<i>IGFBPL1</i>	Centromeric 9p assay (9p13.1)	dHsaCP2506304	FAM	66
		dHsaCP2506715	HEX	66
<i>IHH</i>	Chr2	dHsaCP2500255	FAM	60
		dHsaCP2506389	HEX	60



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<i>IKZF1</i>	Chr7	dHsaCP1000590	FAM	63
		dHsaCP2506515	HEX	63
<i>IL10</i>	Chr1	dHsaCP1000209	FAM	76
		dHsaCP2507067	HEX	76
<i>IL11RA</i>	Chr9	dHsaCP2500410	FAM	63
		dHsaCP2506601	HEX	63
<i>IL17RA</i>	Centromeric 22q assay (22q11.1)	dHsaCP2506323	FAM	69
		dHsaCP2506716	HEX	69
<i>IL1RAPL1</i>	ChrX	dHsaCP2500283	FAM	70
		dHsaCP2506461	HEX	70
<i>IL1RN</i>	Chr2	dHsaCP1000109	FAM	70
		dHsaCP2507068	HEX	70
<i>IL6</i>	Chr7	dHsaCP1000104	FAM	68
		dHsaCP2507069	HEX	68
<i>IQGAP1</i>	Chr15	dHsaCP1000114	FAM	65
		dHsaCP2507070	HEX	65
<i>IRAK4</i>	Centromeric 12q assay (12q12)	dHsaCP2506307	FAM	68
		dHsaCP2506717	HEX	68
<i>IREB2</i>	Chr15	dHsaCP1000108	FAM	68
		dHsaCP2507071	HEX	68
<i>IRS1</i>	Chr2	dHsaCP2500411	FAM	59
		dHsaCP2506602	HEX	59
<i>IRS2</i>	Chr13	dHsaCP2500412	FAM	59
		dHsaCP2506603	HEX	59
<i>ITCH</i>	Chr20	dHsaCP2500413	FAM	80
		dHsaCP2506671	HEX	80
<i>ITGA2</i>	Centromeric 5q assay (5q11.2)	dHsaCP2506279	FAM	69
		dHsaCP2506695	HEX	69
<i>ITGAD</i>	Centromeric 16p assay (16p11.2)	dHsaCP2506311	FAM	68
		dHsaCP2506718	HEX	68
<i>JAK2</i>	Chr9	dHsaCP1000500	FAM	70
		dHsaCP2506349	HEX	70
<i>JMJD1C</i>	Chr10	dHsaCP2500284	FAM	70
		dHsaCP2506462	HEX	70
<i>JUN</i>	Chr1	dHsaCP2500414	FAM	70
		dHsaCP2506552	HEX	70
<i>JUN</i>	Chr1	dHsaCP1000030	FAM	120
		dHsaCP2507072	HEX	120
<i>KAT6B</i>	Chr10	dHsaCP1000129	FAM	63
		dHsaCP2507115	HEX	63
<i>KBTBD4</i>	Centromeric 11p assay (11p11.2)	dHsaCP2506280	FAM	67
		dHsaCP2506696	HEX	67
<i>KCNJ16</i>	Chr17	dHsaCP2500415	FAM	64
		dHsaCP2506604	HEX	64
<i>KCNJ2</i>	Chr17	dHsaCP2500341	FAM	60
		dHsaCP2506516	HEX	60
<i>KCNMA1</i>	Chr10	dHsaCP1000296	FAM	79
		dHsaCP2507073	HEX	79



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<i>KDM4C</i>	Chr9	dHsaCP1000419	FAM	79
		dHsaCP2507074	HEX	79
<i>KDM6A</i>	ChrX	dHsaCP2500416	FAM	67
		dHsaCP2506605	HEX	67
<i>KDM6A</i>	ChrX	dHsaCP1000031	FAM	98
		dHsaCP2507075	HEX	98
<i>KDR</i>	Chr4	dHsaCP2500417	FAM	66
		dHsaCP2506661	HEX	66
<i>KHDRBS2</i>	Centromeric 6q assay (6q11.1)	dHsaCP2506281	FAM	70
		dHsaCP2506681	HEX	70
<i>KIF21A</i>	Centromeric 12q assay (12q12)	dHsaCP2506306	FAM	69
		dHsaCP2506719	HEX	69
<i>KIT</i>	Chr4	dHsaCP1000032	FAM	87
		dHsaCP2500418	FAM	67
<i>KIT</i>	Chr4	dHsaCP2506606	HEX	67
		dHsaCP2507076	HEX	87
<i>KLF8</i>	Centromeric Xp assay (Xp11.21)	dHsaCP2506324	FAM	64
		dHsaCP2506720	HEX	64
<i>KLK6</i>	Chr19	dHsaCP2500256	FAM	64
		dHsaCP2506390	HEX	64
<i>KRAS</i>	Chr12	dHsaCP1000033	FAM	75
		dHsaCP2507077	HEX	75
<i>KYNU</i>	Chr2	dHsaCP2500419	FAM	80
		dHsaCP2506673	HEX	80
<i>LAMB1</i>	Chr7	dHsaCP1000401	FAM	70
		dHsaCP2507078	HEX	70
<i>LCP1</i>	Chr13	dHsaCP2500420	FAM	64
		dHsaCP2506607	HEX	64
<i>LDLR</i>	Chr19	dHsaCP1000455	FAM	70
		dHsaCP2507079	HEX	70
<i>LIPA</i>	Chr10	dHsaCP1000422	FAM	70
		dHsaCP2507080	HEX	70
<i>LIPC</i>	Chr15	dHsaCP1000151	FAM	75
		dHsaCP2507081	HEX	75
<i>LMNA</i>	Chr1	dHsaCP1000139	FAM	61
		dHsaCP2507082	HEX	61
<i>LMNB1</i>	Chr5	dHsaCP1000489	FAM	67
		dHsaCP2506350	HEX	67
<i>LMO1</i>	Chr11	dHsaCP1000591	FAM	66
		dHsaCP2506517	HEX	66
<i>LNX1</i>	Chr4	dHsaCP1000388	FAM	69
		dHsaCP2507083	HEX	69
<i>LPA</i>	Chr6	dHsaCP1000232	FAM	84
		dHsaCP2507084	HEX	84
<i>LPA</i>	Chr6	dHsaCP2500421	FAM	70
		dHsaCP2506608	HEX	70
<i>LRAT</i>	Chr4	dHsaCP1000446	FAM	76
		dHsaCP2507085	HEX	76



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<i>LRP1</i>	Chr12	dHsaCP1000449	FAM	70
		dHsaCP2507086	HEX	70
<i>LRP8</i>	Chr1	dHsaCP1000131	FAM	67
		dHsaCP2507087	HEX	67
<i>LRRC4C</i>	Chr11	dHsaCP1000305	FAM	79
		dHsaCP2507088	HEX	79
<i>LRRN2</i>	Chr1	dHsaCP2500328	FAM	65
		dHsaCP2506518	HEX	65
<i>LRRTM3</i>	Chr10	dHsaCP2500422	FAM	66
		dHsaCP2506609	HEX	66
<i>LSS</i>	Chr21	dHsaCP1000213	FAM	79
		dHsaCP2507089	HEX	79
<i>MAGI1</i>	Chr3	dHsaCP2500257	FAM	68
		dHsaCP2506391	HEX	68
<i>MAGI2</i>	Chr7	dHsaCP1000173	FAM	69
		dHsaCP2507090	HEX	69
<i>MAGI3</i>	Chr1	dHsaCP2500423	FAM	70
		dHsaCP2506553	HEX	70
<i>MAP2K1</i>	Chr15	dHsaCP1000517	FAM	69
		dHsaCP2506351	HEX	69
<i>MAP2K4</i>	Chr17	dHsaCP1000035	FAM	113
		dHsaCP2507091	HEX	113
<i>MAP3K5</i>	Chr6	dHsaCP1000311	FAM	79
		dHsaCP2507092	HEX	79
<i>MAP3K7</i>	Chr6	dHsaCP2500424	FAM	70
		dHsaCP2506610	HEX	70
<i>MAPK7</i>	Chr17	dHsaCP1000152	FAM	62
		dHsaCP2507093	HEX	62
<i>MAPKAPK2</i>	Chr1	dHsaCP1000140	FAM	61
		dHsaCP2507094	HEX	61
<i>MAPT</i>	Chr17	dHsaCP1000170	FAM	69
		dHsaCP2507095	HEX	69
<i>MARCH5</i>	Chr10	dHsaCP1000180	FAM	79
		dHsaCP2507096	HEX	79
<i>MCL1</i>	Chr1	dHsaCP2500425	FAM	70
		dHsaCP2506539	HEX	70
<i>MCM7</i>	Chr7	dHsaCP1000471	FAM	77
		dHsaCP2507097	HEX	77
<i>MDGA2</i>	Chr14	dHsaCP2500285	FAM	70
		dHsaCP2506463	HEX	70
<i>MDM2</i>	Chr12	dHsaCP2500317	FAM	70
		dHsaCP2506519	HEX	70
<i>MDM2</i>	Chr12	dHsaCP1000036	FAM	94
		dHsaCP2507098	HEX	94
<i>MDM4</i>	Chr1	dHsaCP1000592	FAM	70
		dHsaCP2506520	HEX	70
<i>MECP2</i>	ChrX	dHsaCP1000579	FAM	76
		dHsaCP2506535	HEX	76



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>MED1</i>	Chr17	dHsaCP2500426	FAM	68
		dHsaCP2506611	HEX	68
<i>MED29</i>	Chr19	dHsaCP1000297	FAM	80
		dHsaCP2507099	HEX	80
<i>MELK</i>	Chr9	dHsaCP2500427	FAM	70
		dHsaCP2506612	HEX	70
<i>MEOX2</i>	Chr7	dHsaCP2500258	FAM	69
		dHsaCP2506392	HEX	69
<i>MET</i>	Chr7	dHsaCP1000038	FAM	109
		dHsaCP2507100	HEX	109
<i>MET</i>	Chr7	dHsaCP2500321	FAM	62
		dHsaCP2506521	HEX	62
<i>MICA</i>	Chr6	dHsaCP1000372	FAM	119
		dHsaCP2507101	HEX	119
<i>MITF</i>	Chr3	dHsaCP2500428	FAM	65
		dHsaCP2506613	HEX	65
<i>MME</i>	Chr3	dHsaCP1000176	FAM	74
		dHsaCP2507102	HEX	74
<i>MPL</i>	Chr1	dHsaCP1000501	FAM	69
		dHsaCP2506352	HEX	69
<i>MRGPRX1</i>	Chr11	dHsaCP1000474	FAM	88
		dHsaCP2507103	HEX	88
<i>MRPL15</i>	Chr8	dHsaCP2500343	FAM	69
		dHsaCP2506522	HEX	69
<i>MRPS5</i>	Centromeric 2q assay (2q11.1)	dHsaCP2506282	FAM	70
		dHsaCP2506697	HEX	70
<i>MS4A1</i>	Chr11	dHsaCP2500429	FAM	66
		dHsaCP2506662	HEX	66
<i>MS4A4A</i>	Chr11	dHsaCP1000427	FAM	70
		dHsaCP2507104	HEX	70
<i>MS4A6A</i>	Chr11	dHsaCP2500430	FAM	70
		dHsaCP2506614	HEX	70
<i>MSH2</i>	Chr2	dHsaCP2500431	FAM	70
		dHsaCP2506674	HEX	70
<i>MTAP</i>	Chr9	dHsaCP1000039	FAM	111
		dHsaCP2507105	HEX	111
<i>MTCH2</i>	Centromeric 11p assay (11p11.2)	dHsaCP2506283	FAM	65
		dHsaCP2506698	HEX	65
<i>MTDH</i>	Chr8	dHsaCP2500432	FAM	64
		dHsaCP2506615	HEX	64
<i>MTF1</i>	Chr1	dHsaCP2500286	FAM	70
		dHsaCP2506464	HEX	70
<i>MTFP1</i>	Chr22	dHsaCP1000188	FAM	70
		dHsaCP2507107	HEX	70
<i>MTHFD1L</i>	Chr6	dHsaCP1000444	FAM	63
		dHsaCP2507106	HEX	63
<i>MTR</i>	Chr1	dHsaCP1000437	FAM	68
		dHsaCP2507108	HEX	68



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>MTSS1</i>	Chr8	dHsaCP1000193	FAM	65
		dHsaCP2507109	HEX	65
<i>MYB</i>	Chr6	dHsaCP2500433	FAM	68
		dHsaCP2506541	HEX	68
<i>MYBL2</i>	Chr20	dHsaCP1000409	FAM	69
		dHsaCP2507110	HEX	69
<i>MYC</i>	Chr8	dHsaCP2500322	FAM	69
		dHsaCP2506523	HEX	69
<i>MYC</i>	Chr8	dHsaCP1000041	FAM	121
		dHsaCP2507112	HEX	121
<i>MYCL1</i>	Chr1	dHsaCP2500434	FAM	69
		dHsaCP2506540	HEX	69
<i>MYCN</i>	Chr2	dHsaCP2500435	FAM	64
		dHsaCP2506554	HEX	64
<i>MYCN</i>	Chr2	dHsaCP1000042	FAM	100
		dHsaCP2507111	HEX	100
<i>MYH13</i>	Chr17	dHsaCP1000376	FAM	68
		dHsaCP2507113	HEX	68
<i>MYLK3</i>	Centromeric 16q assay (16q11.2)	dHsaCP2506314	FAM	61
		dHsaCP2506721	HEX	61
<i>MYNN</i>	Chr3	dHsaCP1000395	FAM	62
		dHsaCP2507114	HEX	62
<i>MYT1L</i>	Chr2	dHsaCP2500259	FAM	62
		dHsaCP2506393	HEX	62
<i>NAT1</i>	Chr8	dHsaCP2500260	FAM	67
		dHsaCP2506394	HEX	67
<i>NBEA</i>	Chr13	dHsaCP2500287	FAM	69
		dHsaCP2506465	HEX	69
<i>NCAM2</i>	Chr21	dHsaCP1000212	FAM	79
		dHsaCP2507116	HEX	79
<i>NCAPD2</i>	Chr12	dHsaCP1000374	FAM	75
		dHsaCP2507117	HEX	75
<i>NCOA2</i>	Chr8	dHsaCP1000113	FAM	70
		dHsaCP2507118	HEX	70
<i>NCOA3</i>	Chr20	dHsaCP2500436	FAM	67
		dHsaCP2506555	HEX	67
<i>NCOR1</i>	Chr17	dHsaCP2500437	FAM	70
		dHsaCP2506556	HEX	70
<i>NCSTN</i>	Chr1	dHsaCP2500438	FAM	70
		dHsaCP2506616	HEX	70
<i>NDE1</i>	Chr16	dHsaCP2500261	FAM	64
		dHsaCP2506395	HEX	64
<i>NDRG1</i>	Chr8	dHsaCP1000415	FAM	61
		dHsaCP2507119	HEX	61
<i>NDUFA6</i>	Chr22	dHsaCP2500439	FAM	69
		dHsaCP2506617	HEX	69
<i>NEDD9</i>	Chr6	dHsaCP1000467	FAM	72



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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>NEGR1</i>	Chr1	dHsaCP2507120	HEX	72
		dHsaCP2500288	FAM	68
		dHsaCP2506466	HEX	68
<i>NEUROD1</i>	Chr2	dHsaCP1000141	FAM	64
		dHsaCP2507121	HEX	64
<i>NF1</i>	Chr17	dHsaCP1000177	FAM	70
		dHsaCP2507122	HEX	70
<i>NF2</i>	Chr22	dHsaCP1000507	FAM	70
		dHsaCP2506353	HEX	70
<i>NFAT5</i>	Chr16	dHsaCP1000269	FAM	69
		dHsaCP2507208	HEX	69
<i>NIPA1</i>	Centromeric 15q assay (15q11.2)	dHsaCP2500262	FAM	61
		dHsaCP2506396	HEX	61
<i>NIPA2</i>	Centromeric 15q assay (15q11.2)	dHsaCP2500263	FAM	68
		dHsaCP2506397	HEX	68
<i>NIPBL</i>	Chr5	dHsaCP2500289	FAM	68
		dHsaCP2506467	HEX	68
<i>NKX3-1</i>	Chr8	dHsaCP2500440	FAM	65
		dHsaCP2506557	HEX	65
<i>NLGN1</i>	Chr3	dHsaCP2500290	FAM	65
		dHsaCP2506468	HEX	65
<i>NLGN3</i>	ChrX	dHsaCP2500291	FAM	65
		dHsaCP2506469	HEX	65
<i>NOS3</i>	Chr7	dHsaCP1000146	FAM	70
		dHsaCP2507123	HEX	70
<i>NOTCH1</i>	Chr9	dHsaCP1000509	FAM	58
		dHsaCP2506354	HEX	58
<i>NOTCH2</i>	Centromeric 1p assay (1p12)	dHsaCP1000518	FAM	68
		dHsaCP2506355	HEX	68
<i>NOTCH2</i>	Chr1	dHsaCP2506699	HEX	63
<i>NQO1</i>	Chr16	dHsaCP2500441	FAM	67
		dHsaCP2506618	HEX	67
<i>NRAS</i>	Chr1	dHsaCP1000493	FAM	66
		dHsaCP2506356	HEX	66
<i>NRBP2</i>	Chr8	dHsaCP1000487	FAM	61
		dHsaCP2506357	HEX	61
<i>NRCAM</i>	Chr7	dHsaCP2500292	FAM	65
		dHsaCP2506470	HEX	65
<i>NRXN1</i>	Chr2	dHsaCP2500264	FAM	63
		dHsaCP2506398	HEX	63
<i>NRXN2</i>	Chr11	dHsaCP1000488	FAM	67
		dHsaCP2506358	HEX	67
<i>NSD1</i>	Chr5	dHsaCP2500293	FAM	65
		dHsaCP2506471	HEX	65
<i>NSF</i>	Chr17	dHsaCP1000390	FAM	68
		dHsaCP2507124	HEX	68
<i>NSUN3</i>	Centromeric 3q assay (3q11.1)	dHsaCP2506284	FAM	70
		dHsaCP2506682	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
NUMBL	Chr19	dHsaCP1000466	FAM	72
		dHsaCP2507125	HEX	72
NUP188	Chr9	dHsaCP2500265	FAM	63
		dHsaCP2506399	HEX	63
NXPH1	Chr7	dHsaCP1000207	FAM	77
		dHsaCP2507126	HEX	77
OLIG2	Chr21	dHsaCP1000187	FAM	69
		dHsaCP2507127	HEX	69
OR4K2	Chr14	dHsaCP2500266	FAM	67
		dHsaCP2506400	HEX	67
OR56A3	Chr11	dHsaCP2506285	FAM	66
		dHsaCP2506704	HEX	66
ORAOV1	Chr11	dHsaCP2500442	FAM	70
		dHsaCP2506558	HEX	70
ORAOV1	Chr11	dHsaCP1000045	FAM	117
		dHsaCP2507128	HEX	117
ORC6	Centromeric 16q assay (16q11.2)	dHsaCP2506313	FAM	70
		dHsaCP2506722	HEX	70
OTOP1	Chr4	dHsaCP1000365	FAM	108
		dHsaCP2507129	HEX	108
PAK1	Chr11	dHsaCP1000123	FAM	68
		dHsaCP2507130	HEX	68
PAK4	Chr19	dHsaCP1000593	FAM	65
		dHsaCP2506524	HEX	65
PAK7	Chr20	dHsaCP2500294	FAM	67
		dHsaCP2506472	HEX	67
PARK2	Chr6	dHsaCP1000046	FAM	70
		dHsaCP2507131	HEX	70
PARP8	Centromeric 5q assay (5q11.1)	dHsaCP2506286	FAM	67
		dHsaCP2506700	HEX	67
PAX2	Chr10	dHsaCP2500267	FAM	63
		dHsaCP2506401	HEX	63
PAX6	Chr11	dHsaCP2500268	FAM	68
		dHsaCP2506402	HEX	68
PAX9	Chr14	dHsaCP2500443	FAM	70
		dHsaCP2506559	HEX	70
PCDH10	Chr4	dHsaCP2500295	FAM	63
		dHsaCP2506473	HEX	63
PCDH19	ChrX	dHsaCP2500269	FAM	61
		dHsaCP2506403	HEX	61
PCDH9	Chr13	dHsaCP2500296	FAM	65
		dHsaCP2506474	HEX	65
PCK1	Chr20	dHsaCP1000450	FAM	70
		dHsaCP2507132	HEX	70
PCM1	Chr8	dHsaCP1000528	FAM	66
		dHsaCP2506536	HEX	66
PDCD10	Chr3	dHsaCP2500334	FAM	78
		dHsaCP2506525	HEX	78



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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>PDE4DIP</i>	Chr1	dHsaCP1000331	FAM	90
		dHsaCP2507133	HEX	90
<i>PDE9A</i>	Chr21	dHsaCP2500297	FAM	67
		dHsaCP2506475	HEX	67
<i>PDGFB</i>	Chr22	dHsaCP1000583	FAM	70
		dHsaCP2506526	HEX	70
<i>PDGFRA</i>	Chr4	dHsaCP1000047	FAM	73
		dHsaCP2507134	HEX	73
<i>PDGFRB</i>	Chr5	dHsaCP1000432	FAM	67
		dHsaCP2507135	HEX	67
<i>PDGFRL</i>	Chr8	dHsaCP1000414	FAM	69
		dHsaCP2507136	HEX	69
<i>PICALM</i>	Chr11	dHsaCP2500444	FAM	70
		dHsaCP2506619	HEX	70
<i>PIK3CA</i>	Chr3	dHsaCP1000048	FAM	111
		dHsaCP2507137	HEX	111
<i>PIK3CA</i>	Chr3	dHsaCP2506261	FAM	75
		dHsaCP2506263	HEX	75
<i>PIK3CA</i>	Chr3	dHsaCP2500445	FAM	68
		dHsaCP2506946	HEX	68
<i>PIK3CA</i>	Chr3	dHsaCP2506260	FAM	79
		dHsaCP2506262	HEX	79
<i>PIK3R1</i>	Chr5	dHsaCP1000119	FAM	68
		dHsaCP2507138	HEX	68
<i>PIK3R5</i>	Chr17	dHsaCP1000519	FAM	64
		dHsaCP2506359	HEX	64
<i>PIP5K1B</i>	Chr9	dHsaCP2500298	FAM	68
		dHsaCP2506476	HEX	68
<i>PITRM1</i>	Chr10	dHsaCP1000423	FAM	70
		dHsaCP2507139	HEX	70
<i>PLA2G4A</i>	Chr1	dHsaCP2500270	FAM	70
		dHsaCP2506404	HEX	70
<i>PLAU</i>	Chr10	dHsaCP2500335	FAM	69
		dHsaCP2506527	HEX	69
<i>PLD3</i>	Chr19	dHsaCP1000490	FAM	67
		dHsaCP2506360	HEX	67
<i>PLEKHF1</i>	Centromeric 19q assay (19q12)	dHsaCP2506315	FAM	69
		dHsaCP2506723	HEX	69
<i>PML</i>	Chr15	dHsaCP2500446	FAM	58
		dHsaCP2506649	HEX	58
<i>PMP22</i>	Chr17	dHsaCP2500327	FAM	66
		dHsaCP2506528	HEX	66
<i>POMT1</i>	Chr9	dHsaCP1000458	FAM	66
		dHsaCP2507140	HEX	66
<i>POMT2</i>	Chr14	dHsaCP1000377	FAM	66
		dHsaCP2507141	HEX	66
<i>PPAPDC1B</i>	Chr8	dHsaCP2500447	FAM	70
		dHsaCP2506620	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
PPARA	Chr22	dHsaCP1000171	FAM	79
		dHsaCP2507142	HEX	79
PPARG	Chr3	dHsaCP1000462	FAM	69
		dHsaCP2507143	HEX	69
PPIL2	Chr22	dHsaCP1000406	FAM	65
		dHsaCP2507144	HEX	65
PPP1R1B	Chr17	dHsaCP1000460	FAM	70
		dHsaCP2507145	HEX	70
PPP1R3A	Chr7	dHsaCP2500448	FAM	69
		dHsaCP2506621	HEX	69
PPP2R1A	Chr19	dHsaCP1000049	FAM	74
		dHsaCP2507146	HEX	74
PPP2R2A	Chr8	dHsaCP1000336	FAM	100
		dHsaCP2507147	HEX	100
PPP3CB	Chr10	dHsaCP1000205	FAM	74
		dHsaCP2507148	HEX	74
PRH1	Chr12	dHsaCP1000373	FAM	145
		dHsaCP2507149	HEX	145
PRH2	Chr12	dHsaCP1000361	FAM	176
		dHsaCP2507150	HEX	176
PRKAB2	Chr1	dHsaCP2500449	FAM	68
		dHsaCP2506622	HEX	68
PRKAG2	Chr7	dHsaCP2500299	FAM	70
		dHsaCP2506477	HEX	70
PRKCB	Chr16	dHsaCP2500300	FAM	65
		dHsaCP2506478	HEX	65
PRR4	Chr12	dHsaCP1000428	FAM	70
		dHsaCP2507151	HEX	70
PSAP	Chr10	dHsaCP1000178	FAM	62
		dHsaCP2507152	HEX	62
PSEN1	Chr14	dHsaCP1000050	FAM	105
		dHsaCP2507153	HEX	105
PSEN2	Chr1	dHsaCP2500450	FAM	69
		dHsaCP2506623	HEX	69
PTCH1	Chr9	dHsaCP1000505	FAM	68
		dHsaCP2506361	HEX	68
PTEN	Chr10	dHsaCP2500323	FAM	70
		dHsaCP2506529	HEX	70
PTEN	Chr10	dHsaCP1000051	FAM	121
		dHsaCP2507154	HEX	121
PTK2	Chr8	dHsaCP1000155	FAM	70
		dHsaCP2507155	HEX	70
PTP4A3	Chr8	dHsaCP1000167	FAM	67
		dHsaCP2507156	HEX	67
PUF60	Chr8	dHsaCP2500451	FAM	69
		dHsaCP2506624	HEX	69
PUF60	Chr8	dHsaCP1000328	FAM	82
		dHsaCP2507157	HEX	82



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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>PVRL2</i>	Chr19	dHsaCP2500452	FAM	68
		dHsaCP2506625	HEX	68
<i>RAB23</i>	Chr6	dHsaCP2500453	FAM	70
		dHsaCP2506626	HEX	70
<i>RAB4A</i>	Chr1	dHsaCP2500454	FAM	70
		dHsaCP2506627	HEX	70
<i>RAF1</i>	Chr3	dHsaCP1000461	FAM	63
		dHsaCP2507158	HEX	63
<i>RAI1</i>	Chr17	dHsaCP1000425	FAM	68
		dHsaCP2507159	HEX	68
<i>RARA</i>	Chr17	dHsaCP2500455	FAM	68
		dHsaCP2506650	HEX	68
<i>RB1</i>	Chr13	dHsaCP1000052	FAM	117
		dHsaCP2507160	HEX	117
<i>RB1</i>	Chr13	dHsaCP2500456	FAM	69
		dHsaCP2506560	HEX	69
<i>RBFOX1</i>	Chr16	dHsaCP2500338	FAM	69
		dHsaCP2506530	HEX	69
<i>RBM11</i>	Centromeric 21q assay (21q11.2)	dHsaCP2506321	FAM	70
		dHsaCP2506724	HEX	70
<i>REL</i>	Chr2	dHsaCP2500457	FAM	69
		dHsaCP2506561	HEX	69
<i>RELN</i>	Chr7	dHsaCP2500271	FAM	67
		dHsaCP2506405	HEX	67
<i>REN</i>	Chr1	dHsaCP1000118	FAM	67
		dHsaCP2507161	HEX	67
<i>RET</i>	Chr10	dHsaCP1000510	FAM	64
		dHsaCP2506362	HEX	64
<i>RFTN1</i>	Chr3	dHsaCP1000225	FAM	88
		dHsaCP2507162	HEX	88
<i>RIBC1</i>	ChrX	dHsaCP2500272	FAM	66
		dHsaCP2506406	HEX	66
<i>RNF139</i>	Chr8	dHsaCP2500458	FAM	59
		dHsaCP2506628	HEX	59
<i>RNF170</i>	Centromeric 8p assay (8p11.21)	dHsaCP2506287	FAM	67
		dHsaCP2506701	HEX	67
<i>RNF8</i>	Chr6	dHsaCP2500301	FAM	70
		dHsaCP2506479	HEX	70
<i>ROCK2</i>	Chr2	dHsaCP2500273	FAM	69
		dHsaCP2506407	HEX	69
<i>RPH3AL</i>	Chr17	dHsaCP1000326	FAM	73
		dHsaCP2507163	HEX	73
<i>RPP30</i>	Chr10	dHsaCP1000270	FAM	98
		dHsaCP1000485	HEX	98
<i>RPP30</i>	Chr10	dHsaCP2500313	FAM	67
		dHsaCP2500350	HEX	67
<i>RPS6KB1</i>	Chr17	dHsaCP1000054	FAM	116
		dHsaCP2507164	HEX	116



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>RRAGB</i>	Centromeric Xp assay (Xp11.21)	dHsaCP2506325	FAM	70
		dHsaCP2506725	HEX	70
<i>RREB1</i>	Chr6	dHsaCP2500459	FAM	69
		dHsaCP2506538	HEX	69
<i>RSF1</i>	Chr11	dHsaCP2500460	FAM	65
		dHsaCP2506629	HEX	65
<i>RTEL1-TNFRSF6B</i>	Chr20	dHsaCP1000379	FAM	61
		dHsaCP2507165	HEX	61
<i>RUNX1</i>	Chr21	dHsaCP1000308	FAM	77
		dHsaCP2507167	HEX	77
<i>RUNX1T1</i>	Chr8	dHsaCP1000393	FAM	68
		dHsaCP2507166	HEX	68
<i>RUNX2</i>	Chr6	dHsaCP2506288	FAM	67
		dHsaCP2506434	HEX	67
<i>RUNX3</i>	Chr1	dHsaCP2500461	FAM	67
		dHsaCP2506630	HEX	67
<i>SAMSN1</i>	Centromeric 21q assay (21q11.2)	dHsaCP2506322	FAM	70
		dHsaCP2506726	HEX	70
<i>SCAMP1</i>	Chr5	dHsaCP2506289	FAM	60
		dHsaCP2506702	HEX	60
<i>SCN2A</i>	Chr2	dHsaCP2506290	FAM	69
		dHsaCP2506435	HEX	69
<i>SCN3A</i>	Chr2	dHsaCP1000538	FAM	70
		dHsaCP2506436	HEX	70
<i>SCN7A</i>	Chr2	dHsaCP2500302	FAM	65
		dHsaCP2506480	HEX	65
<i>SCRIB</i>	Chr8	dHsaCP1000486	FAM	69
		dHsaCP2506363	HEX	69
<i>SEC24C</i>	Chr10	dHsaCP1000162	FAM	64
		dHsaCP2507168	HEX	64
<i>SEC61G</i>	Chr7	dHsaCP1000303	FAM	76
		dHsaCP2507169	HEX	76
<i>SELENBP1</i>	Chr1	dHsaCP1000539	FAM	62
		dHsaCP2506437	HEX	62
<i>SEMA5A</i>	Chr5	dHsaCP2500303	FAM	70
		dHsaCP2506481	HEX	70
<i>SENP2</i>	Chr3	dHsaCP1000145	FAM	79
		dHsaCP2507170	HEX	79
<i>SFRP1</i>	Chr8	dHsaCP2500462	FAM	70
		dHsaCP2506562	HEX	70
<i>SGPL1</i>	Chr10	dHsaCP1000216	FAM	74
		dHsaCP2507171	HEX	74
<i>SH2B1</i>	Chr16	dHsaCP1000540	FAM	63
		dHsaCP2506438	HEX	63
<i>SHANK2</i>	Chr11	dHsaCP2500304	FAM	67
		dHsaCP2506482	HEX	67
<i>SHANK3</i>	Chr22	dHsaCP2500305	FAM	61
		dHsaCP2506483	HEX	61



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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>SHH</i>	Chr7	dHsaCP2500463	FAM	63
		dHsaCP2506631	HEX	63
<i>SKIL</i>	Chr3	dHsaCP2500464	FAM	66
		dHsaCP2506632	HEX	66
<i>SKP2</i>	Chr5	dHsaCP2500465	FAM	65
		dHsaCP2506633	HEX	65
<i>SLAIN2</i>	Centromeric 4p assay (4p11)	dHsaCP2506299	FAM	70
		dHsaCP2506727	HEX	70
<i>SLC1A3</i>	Chr5	dHsaCP1000541	FAM	69
		dHsaCP2506439	HEX	69
<i>SLC25A12</i>	Chr2	dHsaCP2500306	FAM	69
		dHsaCP2506484	HEX	69
<i>SLC2A2</i>	Chr3	dHsaCP1000143	FAM	69
		dHsaCP2507172	HEX	69
<i>SLC30A3</i>	Chr2	dHsaCP1000542	FAM	61
		dHsaCP2506440	HEX	61
<i>SLC35F2</i>	Chr11	dHsaCP1000543	FAM	68
		dHsaCP2506441	HEX	68
<i>SLC4A10</i>	Chr2	dHsaCP2500307	FAM	68
		dHsaCP2506485	HEX	68
<i>SLC7A2</i>	Chr8	dHsaCP1000473	FAM	88
		dHsaCP2500466	HEX	88
<i>SLC7A2</i>	Chr8	dHsaCP2506634	FAM	64
		dHsaCP2507173	HEX	64
<i>SLC9A9</i>	Chr3	dHsaCP2500308	FAM	68
		dHsaCP2506486	HEX	68
<i>SLIT2</i>	Chr4	dHsaCP2500467	FAM	66
		dHsaCP2506635	HEX	66
<i>SMAD3</i>	Chr15	dHsaCP1000153	FAM	70
		dHsaCP2507174	HEX	70
<i>SMAD4</i>	Chr18	dHsaCP2500468	FAM	70
		dHsaCP2506563	HEX	70
<i>SMARCB1</i>	Chr22	dHsaCP1000520	FAM	58
		dHsaCP2506364	HEX	58
<i>SMC1A</i>	ChrX	dHsaCP1000544	FAM	67
		dHsaCP2506442	HEX	67
<i>SMCR5</i>	Chr17	dHsaCP2500469	FAM	66
		dHsaCP2506651	HEX	66
<i>SMO</i>	Chr7	dHsaCP1000506	FAM	68
		dHsaCP2506365	HEX	68
<i>SMURF1</i>	Chr7	dHsaCP1000183	FAM	68
		dHsaCP2507175	HEX	68
<i>SNCA</i>	Chr4	dHsaCP1000476	FAM	100
		dHsaCP2507176	HEX	100
<i>SNCA</i>	Chr4	dHsaCP2500470	FAM	63
		dHsaCP2506564	HEX	63
<i>SNRPN</i>	Chr15	dHsaCP2500471	FAM	70
		dHsaCP2506652	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
SOAT1	Chr1	dHsaCP1000482	FAM	79
		dHsaCP2507177	HEX	79
SORCS1	Chr10	dHsaCP1000424	FAM	69
		dHsaCP2507178	HEX	69
SORCS2	Chr4	dHsaCP1000168	FAM	70
		dHsaCP2507179	HEX	70
SORCS3	Chr10	dHsaCP1000127	FAM	61
		dHsaCP2507180	HEX	61
SORL1	Chr11	dHsaCP1000189	FAM	66
		dHsaCP2507181	HEX	66
SOS2	Chr14	dHsaCP1000197	FAM	72
		dHsaCP2507182	HEX	72
SOX2	Chr3	dHsaCP1000165	FAM	75
		dHsaCP2507183	HEX	75
SOX8	Chr16	dHsaCP1000291	FAM	78
		dHsaCP2507184	HEX	78
SPATA18	Centromeric 4q assay (4q12)	dHsaCP2506301	FAM	67
		dHsaCP2506728	HEX	67
SPIN4	Centromeric Xq assay (Xq11.1)	dHsaCP2506326	FAM	70
		dHsaCP2506729	HEX	70
SPRY2	Chr13	dHsaCP1000545	FAM	63
		dHsaCP2506443	HEX	63
SRY	ChrY	dHsaCP2500472	FAM	69
		dHsaCP2506653	HEX	69
SS18L1	Chr20	dHsaCP1000194	FAM	68
		dHsaCP2507185	HEX	68
STK11	Chr19	dHsaCP1000502	FAM	69
		dHsaCP2506366	HEX	69
STK3	Chr8	dHsaCP2500309	FAM	70
		dHsaCP2506487	HEX	70
STS	ChrX	dHsaCP2500473	FAM	70
		dHsaCP2506654	HEX	70
SUN5	Centromeric 20q assay (20q11.21)	dHsaCP2506320	FAM	61
		dHsaCP2506730	HEX	61
SYT10	Centromeric 12p assay (12p11.1)	dHsaCP2506305	FAM	67
		dHsaCP2506731	HEX	67
TACR2	Chr10	dHsaCP1000391	FAM	66
		dHsaCP2507186	HEX	66
TAP2	Chr6	dHsaCP1000185	FAM	70
		dHsaCP2507187	HEX	70
TAS2R13	Chr12	dHsaCP2500326	FAM	70
		dHsaCP2506531	HEX	70
TAS2R14	Chr12	dHsaCP1000330	FAM	89
		dHsaCP2507188	HEX	89
TAS2R9	Chr12	dHsaCP2500474	FAM	67
		dHsaCP2506636	HEX	67
TBL1XR1	Chr3	dHsaCP1000163	FAM	66
		dHsaCP2507189	HEX	66



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
TBX1	Chr22	dHsaCP2500310	FAM	68
		dHsaCP2506488	HEX	68
TCF7L2	Chr10	dHsaCP1000122	FAM	70
		dHsaCP2507190	HEX	70
TERT	Chr5	dHsaCP1000100	HEX	100
		dHsaCP1000059	FAM	100
TERT	Chr5	dHsaCP2500314	FAM	70
		dHsaCP2500351	HEX	70
TET2	Chr4	dHsaCP1000515	FAM	70
		dHsaCP2506367	HEX	70
TF	Chr3	dHsaCP1000402	FAM	69
		dHsaCP2507192	HEX	69
TFDP1	Chr13	dHsaCP1000181	FAM	67
		dHsaCP2507191	HEX	67
TGFB2	Chr1	dHsaCP1000404	FAM	65
		dHsaCP2507193	HEX	65
TGFB3	Chr14	dHsaCP1000468	FAM	65
		dHsaCP2507194	HEX	65
TGFB2	Chr3	dHsaCP1000546	FAM	70
		dHsaCP2506444	HEX	70
TGM4	Chr3	dHsaCP1000192	FAM	68
		dHsaCP2507195	HEX	68
THNSL2	Centromeric 2p assay (2p11.2)	dHsaCP2506297	FAM	68
		dHsaCP2506732	HEX	68
THRA	Chr17	dHsaCP1000452	FAM	70
		dHsaCP2507196	HEX	70
TMEM11	Centromeric 17p assay (17p11.2)	dHsaCP2506291	FAM	58
		dHsaCP2506683	HEX	58
TMEM63C	Chr14	dHsaCP1000150	FAM	63
		dHsaCP2507197	HEX	63
TNC	Chr9	dHsaCP1000383	FAM	66
		dHsaCP2507198	HEX	66
TNFRSF8	Chr1	dHsaCP2500475	FAM	65
		dHsaCP2506663	HEX	65
TOLLIP	Chr11	dHsaCP2500476	FAM	68
		dHsaCP2506667	HEX	68
TOP2A	Chr17	dHsaCP1000459	FAM	68
		dHsaCP2507199	HEX	68
TP53	Chr17	dHsaCP1000586	FAM	65
		dHsaCP2506532	HEX	65
TP63	Chr3	dHsaCP1000389	FAM	67
		dHsaCP2507200	HEX	67
TP73	Chr1	dHsaCP1000392	FAM	69
		dHsaCP2507201	HEX	69
TPX2	Chr20	dHsaCP1000400	FAM	66
		dHsaCP2507202	HEX	66
TRAFD1	Chr12	dHsaCP2500477	FAM	70
		dHsaCP2506668	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>TREM2</i>	Chr6	dHsaCP1000491	FAM	63
		dHsaCP2506368	HEX	63
<i>TRPC4AP</i>	Chr20	dHsaCP1000408	FAM	66
		dHsaCP2507203	HEX	66
<i>TRRAP</i>	Chr7	dHsaCP1000175	FAM	65
		dHsaCP2507204	HEX	65
<i>TSC1</i>	Chr9	dHsaCP2500478	FAM	66
		dHsaCP2506637	HEX	66
<i>TSC2</i>	Chr16	dHsaCP1000061	FAM	97
		dHsaCP2507205	HEX	97
<i>TSC2</i>	Chr16	dHsaCP2500479	FAM	63
		dHsaCP2506638	HEX	63
<i>TSHR</i>	Chr14	dHsaCP1000511	FAM	70
		dHsaCP2506369	HEX	70
<i>TSPAN7</i>	ChrX	dHsaCP1000547	FAM	65
		dHsaCP2506445	HEX	65
<i>TTC5</i>	Centromeric 14q assay (14q11.2)	dHsaCP2506310	FAM	59
		dHsaCP2506733	HEX	59
<i>TUBGCP5</i>	Chr15	dHsaCP1000548	FAM	70
		dHsaCP2506446	HEX	70
<i>TUSC3</i>	Chr8	dHsaCP2500342	FAM	70
		dHsaCP2506533	HEX	70
<i>TUSC3</i>	Chr8	dHsaCP1000344	FAM	138
		dHsaCP2507206	HEX	138
<i>TWSG1</i>	Chr18	dHsaCP2500480	FAM	67
		dHsaCP2506670	HEX	67
<i>UBD</i>	Chr6	dHsaCP2500481	FAM	68
		dHsaCP2506639	HEX	68
<i>UBE2C</i>	Chr20	dHsaCP1000159	FAM	70
		dHsaCP2507207	HEX	70
<i>UBE3A</i>	Chr15	dHsaCP2500482	FAM	70
		dHsaCP2506640	HEX	70
<i>URI1</i>	Centromeric 19q assay (19q12)	dHsaCP2506316	FAM	69
		dHsaCP2506734	HEX	69
<i>USP9Y</i>	Centromeric Yq assay (Yq11.21)	dHsaCP2506328	FAM	69
		dHsaCP2506735	HEX	69
<i>VCL</i>	Chr10	dHsaCP1000382	FAM	65
		dHsaCP2507209	HEX	65
<i>VCP</i>	Chr9	dHsaCP1000149	FAM	60
		dHsaCP2507210	HEX	60
<i>VEGFA</i>	Chr6	dHsaCP2500483	FAM	64
		dHsaCP2506565	HEX	64
<i>VEGFB</i>	Chr11	dHsaCP2500484	FAM	65
		dHsaCP2506664	HEX	65
<i>VEGFC</i>	Chr4	dHsaCP2500485	FAM	69
		dHsaCP2506665	HEX	69
<i>VHL</i>	Chr3	dHsaCP1000521	FAM	69
		dHsaCP2506370	HEX	69



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Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
VIPR2	Chr7	dHsaCP1000549	FAM	68
		dHsaCP2506447	HEX	68
VOPP1	Centromeric 7p assay (7p11.2)	dHsaCP2506292	FAM	64
		dHsaCP2506684	HEX	64
VPS13B	Chr8	dHsaCP1000550	FAM	64
		dHsaCP2506448	HEX	64
VPS26A	Chr10	dHsaCP1000447	FAM	72
		dHsaCP2507211	HEX	72
WDR4	Chr21	dHsaCP2500311	FAM	69
		dHsaCP2506489	HEX	69
WHSC1L1	Chr8	dHsaCP1000062	FAM	120
		dHsaCP2507212	HEX	120
WHSC1L1	Chr8	dHsaCP2500486	FAM	59
		dHsaCP2506566	HEX	59
WISP1	Chr8	dHsaCP1000063	FAM	85
		dHsaCP2507213	HEX	85
WISP1	Chr8	dHsaCP2500487	FAM	69
		dHsaCP2506641	HEX	69
WISP2	Chr20	dHsaCP1000320	FAM	87
		dHsaCP2507214	HEX	87
WNT2	Chr7	dHsaCP2500488	FAM	69
		dHsaCP2506642	HEX	69
WRN	Chr8	dHsaCP2506293	FAM	70
		dHsaCP2506738	HEX	70
WSB1	Centromeric 17q assay (17q11.1)	dHsaCP2506294	FAM	63
		dHsaCP2506685	HEX	63
WT1	Chr11	dHsaCP2500489	FAM	67
		dHsaCP2506643	HEX	67
WWC1	Chr5	dHsaCP1000431	FAM	62
		dHsaCP2507215	HEX	62
WWP1	Chr8	dHsaCP2500490	FAM	70
		dHsaCP2506644	HEX	70
XIST	ChrX	dHsaCP2500491	FAM	65
		dHsaCP2506655	HEX	65
YAP1	Chr11	dHsaCP1000064	FAM	78
		dHsaCP2507216	HEX	78
YWHAE	Chr17	dHsaCP1000551	FAM	69
		dHsaCP2506449	HEX	69
ZFX3	Chr16	dHsaCP1000115	FAM	67
		dHsaCP2507217	HEX	67
ZFP64	Chr20	dHsaCP1000378	FAM	60
		dHsaCP2507218	HEX	60
ZMYM2	Centromeric 13q assay (13q12.11)	dHsaCP2506309	FAM	70
		dHsaCP2506736	HEX	70



Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
ZNF292	Chr6	dHsaCP1000174	FAM	77
		dHsaCP2507219	HEX	77
ZNF521	Chr18	dHsaCP2506295	FAM	65
		dHsaCP2506703	HEX	65
ZNF778	Chr16	dHsaCP1000552	FAM	69
		dHsaCP2506450	HEX	69
ZNF843	Centromeric 16p assay (16p11.2)	dHsaCP2506312	FAM	60
		dHsaCP2506737	HEX	60

Centromeric Copy Number Variation Assays

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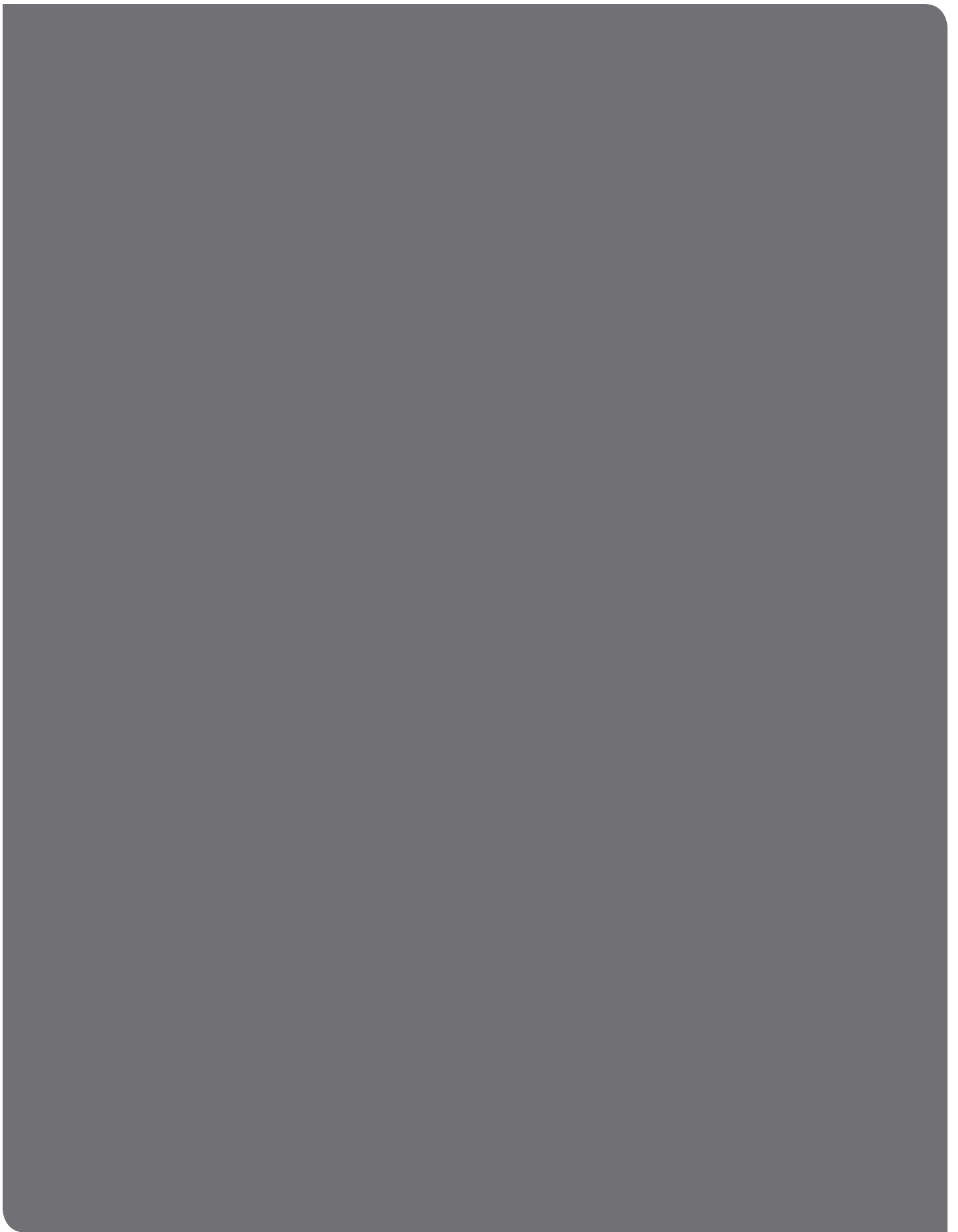
Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>ALDH1B1</i>	Centromeric 9p assay (9p13.2)	dHsaCP2506303	FAM	70
		dHsaCP2506705	HEX	70
<i>ANKRD30A</i>	Centromeric 10p assay (10p11.21)	dHsaCP2506265	FAM	68
		dHsaCP2506687	HEX	68
<i>ANKRD30B</i>	Centromeric 18p assay (18p11.21)	dHsaCP2506266	FAM	64
		dHsaCP2506688	HEX	64
<i>ARHGEF9</i>	Centromeric Xq assay (Xq11.1)	dHsaCP2506327	FAM	66
		dHsaCP2506706	HEX	66
<i>ARL13B</i>	Centromeric 3q assay (3q11.1)	dHsaCP2506267	FAM	70
		dHsaCP2506677	HEX	70
<i>ASL</i>	Centromeric 7q assay (7q11.21)	dHsaCP2506268	FAM	70
		dHsaCP2506678	HEX	70
<i>CD160</i>	Centromeric 1q assay (1q21.1)	dHsaCP2506269	FAM	69
		dHsaCP2506689	HEX	69
<i>CEBPD</i>	Centromeric 8q assay (8q11.21)	dHsaCP2506270	FAM	61
		dHsaCP2506690	HEX	61
<i>CRCP</i>	Centromeric 7q assay (7q11.21)	dHsaCP2506271	FAM	63
		dHsaCP2506679	HEX	63
<i>DCUN1D4</i>	Centromeric 4q assay (4q12)	dHsaCP2506300	FAM	70
		dHsaCP2506707	HEX	70
<i>DST</i>	Centromeric 6p assay (6p12.1)	dHsaCP2506302	FAM	67
		dHsaCP2506708	HEX	67
<i>ENTPD6</i>	Centromeric 20p assay (20p11.21)	dHsaCP2506317	FAM	65
		dHsaCP2506709	HEX	65
<i>EPHA3</i>	Centromeric 3p assay (3p11.1)	dHsaCP2506272	FAM	70
		dHsaCP2506680	HEX	70
<i>FRYL</i>	Centromeric 4p assay (4p11)	dHsaCP2506298	FAM	68
		dHsaCP2506710	HEX	68
<i>GINS1</i>	Centromeric 20p assay (20p11.21)	dHsaCP2506318	FAM	70
		dHsaCP2506711	HEX	70
<i>GJA3</i>	Centromeric 13q assay (13q12.11)	dHsaCP2506308	FAM	57
		dHsaCP2506712	HEX	57
<i>GREB1L</i>	Centromeric 18q assay (18q11.1)	dHsaCP2506276	FAM	70
		dHsaCP2506693	HEX	70
<i>HAO2</i>	Centromeric 1p assay (1p12)	dHsaCP2506296	FAM	67
		dHsaCP2506713	HEX	67
<i>HCN1</i>	Centromeric 5p assay (5p12)	dHsaCP2506277	FAM	70
		dHsaCP2506694	HEX	70
<i>ID1</i>	Centromeric 20q assay (20q11.21)	dHsaCP2506319	FAM	69
		dHsaCP2506714	HEX	69
<i>IGFBPL1</i>	Centromeric 9p assay (9p13.1)	dHsaCP2506304	FAM	66
		dHsaCP2506715	HEX	66
<i>IL17RA</i>	Centromeric 22q assay (22q11.1)	dHsaCP2506323	FAM	69
		dHsaCP2506716	HEX	69
<i>IRAK4</i>	Centromeric 12q assay (12q12)	dHsaCP2506307	FAM	68
		dHsaCP2506717	HEX	68
<i>ITGA2</i>	Centromeric 5q assay (5q11.2)	dHsaCP2506279	FAM	69
		dHsaCP2506695	HEX	69

Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
ITGAD	Centromeric 16p assay (16p11.2)	dHsaCP2506311	FAM	68
		dHsaCP2506718	HEX	68
KBTBD4	Centromeric 11p assay (11p11.2)	dHsaCP2506280	FAM	67
		dHsaCP2506696	HEX	67
KHDRBS2	Centromeric 6q assay (6q11.1)	dHsaCP2506281	FAM	70
		dHsaCP2506681	HEX	70
KIF21A	Centromeric 12q assay (12q12)	dHsaCP2506306	FAM	69
		dHsaCP2506719	HEX	69
KLF8	Centromeric Xp assay (Xp11.21)	dHsaCP2506324	FAM	64
		dHsaCP2506720	HEX	64
MRPS5	Centromeric 2q assay (2q11.1)	dHsaCP2506282	FAM	70
		dHsaCP2506697	HEX	70
MTCH2	Centromeric 11p assay (11p11.2)	dHsaCP2506283	FAM	65
		dHsaCP2506698	HEX	65
MYLK3	Centromeric 16q assay (16q11.2)	dHsaCP2506314	FAM	61
		dHsaCP2506721	HEX	61
NIPA1	Centromeric 15q assay (15q11.2)	dHsaCP2500262	FAM	61
		dHsaCP2506396	HEX	61
NIPA2	Centromeric 15q assay (15q11.2)	dHsaCP2500263	FAM	68
		dHsaCP2506397	HEX	68
NOTCH2	Centromeric 1p assay (1p12)	dHsaCP1000518	FAM	68
		dHsaCP2506355	HEX	68
NSUN3	Centromeric 3q assay (3q11.1)	dHsaCP2506284	FAM	70
		dHsaCP2506682	HEX	70
ORC6	Centromeric 16q assay (16q11.2)	dHsaCP2506313	FAM	70
		dHsaCP2506722	HEX	70
PARP8	Centromeric 5q assay (5q11.1)	dHsaCP2506286	FAM	67
		dHsaCP2506700	HEX	67
PLEKHF1	Centromeric 19q assay (19q12)	dHsaCP2506315	FAM	69
		dHsaCP2506723	HEX	69
RBM11	Centromeric 21q assay (21q11.2)	dHsaCP2506321	FAM	70
		dHsaCP2506724	HEX	70
RNF170	Centromeric 8p assay (8p11.21)	dHsaCP2506287	FAM	67
		dHsaCP2506701	HEX	67
RRAGB	Centromeric Xp assay (Xp11.21)	dHsaCP2506325	FAM	70
		dHsaCP2506725	HEX	70
SAMSN1	Centromeric 21q assay (21q11.2)	dHsaCP2506322	FAM	70
		dHsaCP2506726	HEX	70
SLAIN2	Centromeric 4p assay (4p11)	dHsaCP2506299	FAM	70
		dHsaCP2506727	HEX	70
SPATA18	Centromeric 4q assay (4q12)	dHsaCP2506301	FAM	67
		dHsaCP2506728	HEX	67
SPIN4	Centromeric Xq assay (Xq11.1)	dHsaCP2506326	FAM	70
		dHsaCP2506729	HEX	70
SUN5	Centromeric 20q assay (20q11.21)	dHsaCP2506320	FAM	61
		dHsaCP2506730	HEX	61
SYT10	Centromeric 12p assay (12p11.1)	dHsaCP2506305	FAM	67
		dHsaCP2506731	HEX	67

Centromeric Copy Number Variation Assays

For research use only.

Gene Name	Chromosome	Unique Assay ID	Fluorophore	Amplicon Length
<i>THNSL2</i>	Centromeric 2p assay (2p11.2)	dHsaCP2506297	FAM	68
		dHsaCP2506732	HEX	68
<i>TMEM11</i>	Centromeric 17p assay (17p11.2)	dHsaCP2506291	FAM	58
		dHsaCP2506683	HEX	58
<i>TTC5</i>	Centromeric 14q assay (14q11.2)	dHsaCP2506310	FAM	59
		dHsaCP2506733	HEX	59
<i>URI1</i>	Centromeric 19q assay (19q12)	dHsaCP2506316	FAM	69
		dHsaCP2506734	HEX	69
<i>USP9Y</i>	Centromeric Yq assay (Yq11.21)	dHsaCP2506328	FAM	69
		dHsaCP2506735	HEX	69
<i>VOPP1</i>	Centromeric 7p assay (7p11.2)	dHsaCP2506292	FAM	64
		dHsaCP2506684	HEX	64
<i>WSB1</i>	Centromeric 17q assay (17q11.1)	dHsaCP2506294	FAM	63
		dHsaCP2506685	HEX	63
<i>ZMYM2</i>	Centromeric 13q assay (13q12.11)	dHsaCP2506309	FAM	70
		dHsaCP2506736	HEX	70
<i>ZNF843</i>	Centromeric 16p assay (16p11.2)	dHsaCP2506312	FAM	60
		dHsaCP2506737	HEX	60



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