

# QuantiNova® LNA® Probe PCR Focus Panels (Rotor-Gene® Format)

## Human Epigenetic Chromatin Remodeling Factors

Cat. no. 249955 UPHS-086ZR

For study focus gene expression analysis

### Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light at 2–8°C for short term storage or at –30°C to –15°C for long time storage. Under these conditions, all components are stable for at least 12 months.

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

For optimal performance, QuantiNova LNA Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

### Panel layout (Rotor-Gene): QuantiNova LNA Probe PCR Focus Panel

The 96 real-time assays in the Rotor-Gene format are located in wells 1–96 of the Rotor-Disc® (plate A1–A12=Rotor-Disc 1–12, plate B1–B12=Rotor-Disc 13–24, etc.). To maintain data analysis compatibility, wells 97–100 do not contain real-time assays but will contain master mix to account for weight balance. Refer to the QuantiNova LNA Probe PCR Handbook at [www.qiagen.com](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ARID1A	ASXL1	BAZ1A	BAZ1B	BAZ2A	BAZ2B	BMI1	BPTF	BRD1	BRD2	BRD3	BRD4
B	BRD7	BRD8	BRDT	BRPF1	BRPF3	BRWD1	BRWD3	CBX1	CBX3	CBX4	CBX5	CBX6
C	CBX7	CBX8	CDYL	CDYL2	CHD1	CHD2	CHD3	CHD4	CHD5	CHD6	CHD7	CHD8
D	CHD9	CTBP1	CTBP2	CTCF	EED	EZH2	HINFP	ING1	ING2	ING3	ING4	ING5
E	INO80	MBD1	MBD2	MBD3	MBD4	MECP2	MTA1	MTA2	NAB2	NSD1	PBRM1	PCGF1
F	PCGF2	PCGF3	PCGF5	PCGF6	PHC1	PHC2	PHF1	PHF13	PHF2	PHF21A	PHF21B	PHF3
G	PHF5A	PHF6	PHF7	RING1	RNF2	SMARCA2	SMARCA4	SPEN	SUZ12	TRIM27	WDR11	ZMYND8
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH0159057	ENST00000457599.6	ARID1A	ENSG00000117713	AT-rich interaction domain 1A Source HGNC Symbol Acc HGNC 11110
A02	UPFH0577833	ENST00000375689.5	ASXL1	ENSG00000171456	ASXL transcriptional regulator 1 Source HGNC Symbol Acc HGNC 18318
A03	UPFH0064095	ENST00000555273.1	BAZ1A	ENSG00000198604	bromodomain adjacent to zinc finger domain 1A Source HGNC Symbol Acc HGNC 960
A04	UPFH0290784	ENST00000339594.9	BAZ1B	ENSG00000009954	bromodomain adjacent to zinc finger domain 1B Source HGNC Symbol Acc HGNC 961
A05	UPFH0567555	ENST00000547650.1	BAZ2A	ENSG00000076108	bromodomain adjacent to zinc finger domain 2A Source HGNC Symbol Acc HGNC 962
A06	UPFH0478233	ENST00000343439.9	BAZ2B	ENSG00000123636	bromodomain adjacent to zinc finger domain 2B Source HGNC Symbol Acc HGNC 963
A07	UPFH0503163	ENST00000602358.5	BMI1	ENSG00000168283	BMI1 proto-oncogene, polycomb ring finger Source HGNC Symbol Acc HGNC 1066
A08	UPFH0403806	ENST00000544491.2	BPTF	ENSG00000171634	bromodomain PHD finger transcription factor Source HGNC Symbol Acc HGNC 3581
A09	UPFH0131028	ENST00000438393.5	BRD1	ENSG00000100425	bromodomain containing 1 Source HGNC Symbol Acc HGNC 1102
A10	UPFH0358715	ENST00000481259.1	BRD2	ENSG00000204256	bromodomain containing 2 Source HGNC Symbol Acc HGNC 1103
A11	UPFH0585145	ENST00000371842.2	BRD3	ENSG00000169925	bromodomain containing 3 Source HGNC Symbol Acc HGNC 1104
A12	UPFH0181246	ENST00000594841.5	BRD4	ENSG00000141867	bromodomain containing 4 Source HGNC Symbol Acc HGNC 13575
B01	UPFH0206902	ENST00000567826.1	BRD7	ENSG00000166164	bromodomain containing 7 Source HGNC Symbol Acc HGNC 14310
B02	UPFH0062823	ENST00000254900.9	BRD8	ENSG00000112983	bromodomain containing 8 Source HGNC Symbol Acc HGNC 19874
B03	UPFH0514849	ENST00000362005.7	BRDT	ENSG00000137948	bromodomain testis associated Source HGNC Symbol Acc HGNC 1105
B04	UPFH0067859	ENST00000383829.6	BRPF1	ENSG00000156983	bromodomain and PHD finger containing 1 Source HGNC Symbol Acc HGNC 14255
B05	UPFH0418903	ENST00000357641.10	BRPF3	ENSG00000096070	bromodomain and PHD finger containing 3 Source HGNC Symbol Acc HGNC 14256
B06	UPFH0467099	ENST00000430093.5	BRWD1	ENSG00000185658	bromodomain and WD repeat domain containing 1 Source HGNC Symbol Acc HGNC 12760
B07	UPFH0304180	ENST00000497335.1	BRWD3	ENSG00000165288	bromodomain and WD repeat domain containing 3 Source HGNC Symbol Acc HGNC 17342
B08	UPFH0569053	ENST00000495350.5	CBX1	ENSG00000108468	chromobox 1 Source HGNC Symbol Acc HGNC 1551
B09	UPFH0299210	ENST00000337620.8	CBX3	ENSG00000122565	chromobox 3 Source HGNC Symbol Acc HGNC 1553
B10	UPFH0161784	ENST00000494546.1	CBX4	ENSG00000141582	chromobox 4 Source HGNC Symbol Acc HGNC 1554
B11	UPFH0096609	ENST00000552562.1	CBX5	ENSG00000094916	chromobox 5 Source HGNC Symbol Acc HGNC 1555
B12	UPFH0557711	ENST00000407418.7	CBX6	ENSG00000183741	chromobox 6 Source HGNC Symbol Acc HGNC 1556
C01	UPFH0496633	ENST00000477827.1	CBX7	ENSG00000100307	chromobox 7 Source HGNC Symbol Acc HGNC 1557
C02	UPFH0446275	ENST00000485449.1	CBX8	ENSG00000141570	chromobox 8 Source HGNC Symbol Acc HGNC 15962
C03	UPFH0157532	ENST00000440139.5	CDYL	ENSG00000153046	chromodomain Y like Source HGNC Symbol Acc HGNC 1811
C04	UPFH0261326	ENST00000570137.7	CDYL2	ENSG00000166446	chromodomain Y like 2 Source HGNC Symbol Acc HGNC 23030
C05	UPFH0592457	ENST00000512392.5	CHD1	ENSG00000153922	chromodomain helicase DNA binding protein 1 Source HGNC Symbol Acc HGNC 1915
C06	UPFH0124810	ENST00000626874.2	CHD2	ENSG00000173575	chromodomain helicase DNA binding protein 2 Source HGNC Symbol Acc HGNC 1917
C07	UPFH0086908	ENST00000466233.1	CHD3	ENSG00000170004	chromodomain helicase DNA binding protein 3 Source HGNC Symbol Acc HGNC 1918
C08	UPFH0374179	ENST00000545942.6	CHD4	ENSG00000111642	chromodomain helicase DNA binding protein 4 Source HGNC Symbol Acc HGNC 1919
C09	UPFH0072484	ENST00000262450.8	CHD5	ENSG00000116254	chromodomain helicase DNA binding protein 5 Source HGNC Symbol Acc HGNC 16816
C10	UPFH0476443	ENST00000309279.11	CHD6	ENSG00000124177	chromodomain helicase DNA binding protein 6 Source HGNC Symbol Acc HGNC 19057
		ENST00000525		ENSG000000	chromodomain helicase DNA binding protein 7 Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0134243	508.1	CHD7	171316	HGNC 20626
C12	UPFH0573597	ENST00000645206.1	CHD8	ENSG00000100888	chromodomain helicase DNA binding protein 8 Source HGNC Symbol Acc HGNC 20153
D01	UPFH0321931	ENST00000615216.4	CHD9	ENSG00000177200	chromodomain helicase DNA binding protein 9 Source HGNC Symbol Acc HGNC 25701
D02	UPFH1132339	ENST00000382952.7	CTBP1	ENSG00000159692	C-terminal binding protein 1 Source HGNC Symbol Acc HGNC 2494
D03	UPFH0124145	ENST00000411419.6	CTBP2	ENSG00000175029	C-terminal binding protein 2 Source HGNC Symbol Acc HGNC 2495
D04	UPFH0029292	ENST00000646566.1	CTCF	ENSG00000102974	CCCTC-binding factor Source HGNC Symbol Acc HGNC 13723
D05	UPFH0235300	ENST00000534564.5	EED	ENSG00000074266	embryonic ectoderm development Source HGNC Symbol Acc HGNC 3188
D06	UPFH0128337	ENST00000320356.6	EZH2	ENSG00000106462	enhancer of zeste 2 polycomb repressive complex 2 subunit Source HGNC Symbol Acc HGNC 3527
D07	UPFH0117088	ENST00000529354.1	HINFP	ENSG00000172273	histone H4 transcription factor Source HGNC Symbol Acc HGNC 17850
D08	UPFH0379255	ENST00000333219.8	ING1	ENSG00000153487	inhibitor of growth family member 1 Source HGNC Symbol Acc HGNC 6062
D09	UPFH0546720	ENST00000302327.4	ING2	ENSG00000168556	inhibitor of growth family member 2 Source HGNC Symbol Acc HGNC 6063
D10	UPFH0203372	ENST00000427726.5	ING3	ENSG00000071243	inhibitor of growth family member 3 Source HGNC Symbol Acc HGNC 14587
D11	UPFH0569846	ENST00000467678.5	ING4	ENSG00000111653	inhibitor of growth family member 4 Source HGNC Symbol Acc HGNC 19423
D12	UPFH0132171	ENST00000493261.5	ING5	ENSG00000168395	inhibitor of growth family member 5 Source HGNC Symbol Acc HGNC 19421
E01	UPFH0052922	ENST00000616814.4	INO80	ENSG00000128908	INO80 complex subunit Source HGNC Symbol Acc HGNC 26956
E02	UPFH1154130	ENST00000587605.5	MBD1	ENSG00000141644	methyl-CpG binding domain protein 1 Source HGNC Symbol Acc HGNC 6916
E03	UPFH1132536	ENST00000256429.8	MBD2	ENSG00000134046	methyl-CpG binding domain protein 2 Source HGNC Symbol Acc HGNC 6917
E04	UPFH0328696	ENST00000592012.5	MBD3	ENSG00000071655	methyl-CpG binding domain protein 3 Source HGNC Symbol Acc HGNC 6918
E05	UPFH1132537	ENST00000393278.6	MBD4	ENSG00000129071	methyl-CpG binding domain 4, DNA glycosylase Source HGNC Symbol Acc HGNC 6919
E06	UPFH0276526	ENST00000415944.3	MECP2	ENSG00000169057	methyl-CpG binding protein 2 Source HGNC Symbol Acc HGNC 6990
E07	UPFH0234938	ENST00000331320.12	MTA1	ENSG00000182979	metastasis associated 1 Source HGNC Symbol Acc HGNC 7410
E08	UPFH0311103	ENST00000527204.5	MTA2	ENSG00000149480	metastasis associated 1 family member 2 Source HGNC Symbol Acc HGNC 7411
E09	UPFH0396952	ENST00000342556.6	NAB2	ENSG00000166886	NGF1-A binding protein 2 Source HGNC Symbol Acc HGNC 7627
E10	UPFH0484749	ENST00000439151.6	NSD1	ENSG00000165671	nuclear receptor binding SET domain protein 1 Source HGNC Symbol Acc HGNC 14234
E11	UPFH0277116	ENST00000409114.7	PBRM1	ENSG00000163939	polybromo 1 Source HGNC Symbol Acc HGNC 30064
E12	UPFH0388385	ENST00000465993.5	PCGF1	ENSG00000115289	polycomb group ring finger 1 Source HGNC Symbol Acc HGNC 17615
F01	UPFH0532144	ENST00000618506.1	PCGF2	ENSG00000277258	polycomb group ring finger 2 Source HGNC Symbol Acc HGNC 12929
F02	UPFH0293973	ENST00000433814.5	PCGF3	ENSG00000185619	polycomb group ring finger 3 Source HGNC Symbol Acc HGNC 10066
F03	UPFH0236554	ENST00000614189.4	PCGF5	ENSG00000180628	polycomb group ring finger 5 Source HGNC Symbol Acc HGNC 28264
F04	UPFH0033141	ENST00000647574.1	PCGF6	ENSG00000156374	polycomb group ring finger 6 Source HGNC Symbol Acc HGNC 21156
F05	UPFH0594115	ENST00000538657.5	PHC1	ENSG00000111752	polyhomeotic homolog 1 Source HGNC Symbol Acc HGNC 3182
F06	UPFH0437239	ENST00000473158.1	PHC2	ENSG00000134686	polyhomeotic homolog 2 Source HGNC Symbol Acc HGNC 3183
F07	UPFH0238222	ENST00000427004.5	PHF1	ENSG00000112511	PHD finger protein 1 Source HGNC Symbol Acc HGNC 8919
F08	UPFH0475529	ENST00000377648.5	PHF13	ENSG00000116273	PHD finger protein 13 Source HGNC Symbol Acc HGNC 22983
F09	UPFH0425520	ENST00000359246.9	PHF2	ENSG00000197724	PHD finger protein 2 Source HGNC Symbol Acc HGNC 8920
F10	UPFH0086226	ENST00000323180.10	PHF21A	ENSG00000135365	PHD finger protein 21A Source HGNC Symbol Acc HGNC 24156

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0478154	ENST00000490679.5	PHF21B	ENSG00000056487	PHD finger protein 21B Source HGNC Symbol Acc HGNC 25161
F12	UPFH0536930	ENST00000506783.5	PHF3	ENSG000000118482	PHD finger protein 3 Source HGNC Symbol Acc HGNC 8921
G01	UPFH0001927	ENST00000491254.1	PHF5A	ENSG000000100410	PHD finger protein 5A Source HGNC Symbol Acc HGNC 18000
G02	UPFH0465328	ENST00000370803.7	PHF6	ENSG000000156531	PHD finger protein 6 Source HGNC Symbol Acc HGNC 18145
G03	UPFH0140263	ENST00000461861.5	PHF7	ENSG000000010318	PHD finger protein 7 Source HGNC Symbol Acc HGNC 18458
G04	UPFH0342258	ENST00000374656.5	RING1	ENSG000000204227	ring finger protein 1 Source HGNC Symbol Acc HGNC 10018
G05	UPFH1132659	ENST00000367510.8	RNF2	ENSG000000121481	ring finger protein 2 Source HGNC Symbol Acc HGNC 10061
G06	UPFH0553890	ENST00000302401.8	SMARCA2	ENSG000000080503	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 Source HGNC Symbol Acc HGNC 11098
G07	UPFH0178136	ENST00000591545.6	SMARCA4	ENSG000000127616	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 Source HGNC Symbol Acc HGNC 11100
G08	UPFH0197733	ENST00000438066.1	SPEN	ENSG000000065526	spen family transcriptional repressor Source HGNC Symbol Acc HGNC 17575
G09	UPFH0616715	ENST00000322652.10	SUZ12	ENSG000000178691	SUZ12, polycomb repressive complex 2 subunit Source HGNC Symbol Acc HGNC 17101
G10	UPFH0316859	ENST00000377194.7	TRIM27	ENSG000000204713	tripartite motif containing 27 Source HGNC Symbol Acc HGNC 9975
G11	UPFH0113384	ENST00000497136.6	WDR11	ENSG000000120008	WD repeat domain 11 Source HGNC Symbol Acc HGNC 13831
G12	UPFH0496884	ENST00000355972.8	ZMYND8	ENSG000000101040	zinc finger MYND-type containing 8 Source HGNC Symbol Acc HGNC 9397
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG000000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG000000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG000000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG000000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG000000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control



## Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
QuantiNova Reverse Transcription Kit (10)*	For 10 x 20 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ l QN ROX Reference Dye, 1.9 ml Water	208252

\*Larger kit sizes available.

The QuantiNova LNA Probe PCR Focus Panels are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

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