

# QuantiNova® LNA® Probe PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

## Human Stem Cell Transcription Factors

Cat. no. 249955 UPHS-501ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	CDX2	DACH1	DLX1	DLX2	DNMT3B	EGR3	ESR1	EZH2	FOXA1	FOXA2	FOXP1	FOXP2
B	FOXP3	GATA1	GATA6	GLI2	HAND1	HOXA10	HOXA11	HOXA2	HOXA3	HOXA7	HOXA9	HOXB1
C	HOXB13	HOXB3	HOXB5	HOXB8	HOXC10	HOXC12	HOXC4	HOXC5	HOXC6	HOXC9	HOXD1	HOXD10
D	HOXD4	HTR7	IRX4	ISL1	JUN	KLF2	KLF4	LIN28B	LMX1B	MSX2	MYC	NANOG
E	NEUROD1	NFATC1	NRX2-2	NOTCH2	NR2F2	OLIG2	PAX1	PAX5	PAX6	PAX9	PCNA	PITX2
F	PITX3	POU4F1	POU4F2	POU5F1	PPARG	RB1	RUNX1	SIX2	SMAD2	SOX2	SOX6	SOX9
G	SP1	STAT1	STAT3	TBX5	TDGF1	TERT	TLX3	VDR	WRN	WT1	ZFPW2	ZIC1
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	UPFH0345164	ENST00000548877.1	CDX2	ENSG00000165556	caudal type homeobox 2 Source HGNC Symbol Acc HGNC 1806
A02	UPFH0589039	ENST00000613252.5	DACH1	ENSG00000276644	dachshund family transcription factor 1 Source HGNC Symbol Acc HGNC 2663
A03	UPFH0446899	ENST00000469444.6	DLX1	ENSG00000144355	distal-less homeobox 1 Source HGNC Symbol Acc HGNC 2914
A04	UPFH1132967	ENST00000234198.9	DLX2	ENSG00000115844	distal-less homeobox 2 Source HGNC Symbol Acc HGNC 2915
A05	UPFH0334974	ENST00000328111.6	DNMT3B	ENSG00000088305	DNA methyltransferase 3 beta Source HGNC Symbol Acc HGNC 2979
A06	UPFH0445244	ENST00000522910.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
A07	UPFH0599047	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
A08	UPFH0128337	ENST00000320356.6	EZH2	ENSG00000106462	enhancer of zeste 2 polycomb repressive complex 2 subunit Source HGNC Symbol Acc HGNC 3527
A09	UPFH0457116	ENST00000250448.3	FOXA1	ENSG00000129514	forkhead box A1 Source HGNC Symbol Acc HGNC 5021
A10	UPFH0135307	ENST00000419308.6	FOXA2	ENSG00000125798	forkhead box A2 Source HGNC Symbol Acc HGNC 5022
A11	UPFH0272801	ENST00000649513.1	FOXP1	ENSG00000114861	forkhead box P1 Source HGNC Symbol Acc HGNC 3823
A12	UPFH0053398	ENST00000350908.9	FOXP2	ENSG00000128573	forkhead box P2 Source HGNC Symbol Acc HGNC 13875
B01	UPFH1132403	ENST00000557224.6	FOXP3	ENSG00000049768	forkhead box P3 Source HGNC Symbol Acc HGNC 6106
B02	UPFH0379883	ENST00000651144.1	GATA1	ENSG00000102145	GATA binding protein 1 Source HGNC Symbol Acc HGNC 4170
B03	UPFH0399887	ENST00000269216.8	GATA6	ENSG00000141448	GATA binding protein 6 Source HGNC Symbol Acc HGNC 4174
B04	UPFH0462614	ENST00000435313.6	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
B05	UPFH0372159	ENST00000231121.3	HAND1	ENSG00000113196	heart and neural crest derivatives expressed 1 Source HGNC Symbol Acc HGNC 4807
B06	UPFH0101067	ENST00000524368.1	HOXA10	ENSG00000253293	homeobox A10 Source HGNC Symbol Acc HGNC 5100
B07	UPFH0250098	ENST00000006015.3	HOXA11	ENSG00000005073	homeobox A11 Source HGNC Symbol Acc HGNC 5101
B08	UPFH0501659	ENST00000612779.1	HOXA2	ENSG00000105996	homeobox A2 Source HGNC Symbol Acc HGNC 5103
B09	UPFH0356448	ENST00000317201.6	HOXA3	ENSG00000105997	homeobox A3 Source HGNC Symbol Acc HGNC 5104
B10	UPFH0555461	ENST00000242159.5	HOXA7	ENSG00000122592	homeobox A7 Source HGNC Symbol Acc HGNC 5108
B11	UPFH0329601	ENST00000489695.1	HOXA9	ENSG00000078399	homeobox A9 Source HGNC Symbol Acc HGNC 5109
B12	UPFH0488972	ENST00000239174.7	HOXB1	ENSG00000120094	homeobox B1 Source HGNC Symbol Acc HGNC 5111
C01	UPFH0233640	ENST00000290295.7	HOXB13	ENSG00000159184	homeobox B13 Source HGNC Symbol Acc HGNC 5112
C02	UPFH0237775	ENST00000460160.5	HOXB3	ENSG00000120093	homeobox B3 Source HGNC Symbol Acc HGNC 5114
C03	UPFH0010354	ENST00000239151.5	HOXB5	ENSG00000120075	homeobox B5 Source HGNC Symbol Acc HGNC 5116
C04	UPFH0265944	ENST00000576562.1	HOXB8	ENSG00000120068	homeobox B8 Source HGNC Symbol Acc HGNC 5119
C05	UPFH0328523	ENST00000303460.5	HOXC10	ENSG00000180818	homeobox C10 Source HGNC Symbol Acc HGNC 5122
C06	UPFH0519740	ENST00000243103.4	HOXC12	ENSG00000123407	homeobox C12 Source HGNC Symbol Acc HGNC 5124
C07	UPFH0189154	ENST00000303406.4	HOXC4	ENSG00000198353	homeobox C4 Source HGNC Symbol Acc HGNC 5126
C08	UPFH0326208	ENST00000312492.2	HOXC5	ENSG00000172789	homeobox C5 Source HGNC Symbol Acc HGNC 5127
C09	UPFH0053762	ENST00000504315.1	HOXC6	ENSG00000197757	homeobox C6 Source HGNC Symbol Acc HGNC 5128
C10	UPFH0314849	ENST00000508190.1	HOXC9	ENSG00000180806	homeobox C9 Source NCBI gene Acc 3225
		ENST00000331		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0492948	462.6	HOXD1	128645	homeobox D1 Source HGNC Symbol Acc HGNC 5132
C12	UPFH0331037	ENST0000049088.2	HOXD10	ENSG00000128710	homeobox D10 Source HGNC Symbol Acc HGNC 5133
D01	UPFH0390089	ENST00000306324.4	HOXD4	ENSG00000170166	homeobox D4 Source HGNC Symbol Acc HGNC 5138
D02	UPFH0231778	ENST00000277874.10	HTR7	ENSG00000148680	5-hydroxytryptamine receptor 7 Source HGNC Symbol Acc HGNC 5302
D03	UPFH0515978	ENST00000505790.5	IRX4	ENSG00000113430	iroquois homeobox 4 Source HGNC Symbol Acc HGNC 6129
D04	UPFH0580045	ENST00000230658.12	ISL1	ENSG00000016082	ISL LIM homeobox 1 Source HGNC Symbol Acc HGNC 6132
D05	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D06	UPFH0347180	ENST00000592003.1	KLF2	ENSG00000127528	Kruppel like factor 2 Source HGNC Symbol Acc HGNC 6347
D07	UPFH0017730	ENST00000374672.5	KLF4	ENSG00000136826	Kruppel like factor 4 Source HGNC Symbol Acc HGNC 6348
D08	UPFH0376767	ENST00000637759.1	LIN28B	ENSG00000187772	lin-28 homolog B Source HGNC Symbol Acc HGNC 32207
D09	UPFH0274694	ENST00000561065.1	LMX1B	ENSG00000136944	LIM homeobox transcription factor 1 beta Source HGNC Symbol Acc HGNC 6654
D10	UPFH0206778	ENST00000239243.7	MSX2	ENSG00000120149	msh homeobox 2 Source HGNC Symbol Acc HGNC 7392
D11	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D12	UPFH1172932	ENST00000541267.5	NANOG	ENSG00000111704	Nanog homeobox Source HGNC Symbol Acc HGNC 20857
E01	UPFH0416171	ENST00000496876.1	NEUROD1	ENSG00000162992	neuronal differentiation 1 Source HGNC Symbol Acc HGNC 7762
E02	UPFH0595445	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
E03	UPFH0018157	ENST00000377142.4	NKX2-2	ENSG00000125820	NK2 homeobox 2 Source HGNC Symbol Acc HGNC 7835
E04	UPFH0591047	ENST00000640021.1	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E05	UPFH0261968	ENST00000394166.8	NR2F2	ENSG00000185551	nuclear receptor subfamily 2 group F member 2 Source HGNC Symbol Acc HGNC 7976
E06	UPFH0058283	ENST00000382357.4	OLIG2	ENSG00000205927	oligodendrocyte transcription factor 2 Source HGNC Symbol Acc HGNC 9398
E07	UPFH0344097	ENST00000460221.1	PAX1	ENSG00000125813	paired box 1 Source HGNC Symbol Acc HGNC 8615
E08	UPFH0136572	ENST00000522003.5	PAX5	ENSG00000196092	paired box 5 Source HGNC Symbol Acc HGNC 8619
E09	UPFH0078275	ENST00000638685.1	PAX6	ENSG00000007372	paired box 6 Source HGNC Symbol Acc HGNC 8620
E10	UPFH0193558	ENST00000554201.1	PAX9	ENSG00000198807	paired box 9 Source HGNC Symbol Acc HGNC 8623
E11	UPFH1132607	ENST00000379160.3	PCNA	ENSG00000132646	proliferating cell nuclear antigen Source HGNC Symbol Acc HGNC 8729
E12	UPFH0543151	ENST00000607868.1	PITX2	ENSG00000164093	paired like homeodomain 2 Source HGNC Symbol Acc HGNC 9005
F01	UPFH0399137	ENST00000370002.8	PITX3	ENSG00000107859	paired like homeodomain 3 Source HGNC Symbol Acc HGNC 9006
F02	UPFH0435658	ENST00000377208.7	POU4F1	ENSG00000152192	POU class 4 homeobox 1 Source HGNC Symbol Acc HGNC 9218
F03	UPFH0030921	ENST00000281321.3	POU4F2	ENSG00000151615	POU class 4 homeobox 2 Source HGNC Symbol Acc HGNC 9219
F04	UPFH1172934	ENST00000441888.7	POU5F1	ENSG00000204531	POU class 5 homeobox 1 Source HGNC Symbol Acc HGNC 9221
F05	UPFH0284890	ENST00000477039.5	PPARG	ENSG00000132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
F06	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F07	UPFH0023287	ENST00000437180.5	RUNX1	ENSG00000159216	runt related transcription factor 1 Source HGNC Symbol Acc HGNC 10471
F08	UPFH0268481	ENST00000303077.7	SIX2	ENSG00000170577	SIX homeobox 2 Source HGNC Symbol Acc HGNC 10888
F09	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F10	UPFH0376428	ENST00000325404.3	SOX2	ENSG00000181449	SRY-box 2 Source HGNC Symbol Acc HGNC 11195

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0474044	ENST00000528252.5	SOX6	ENSG00000110693	SRY-box 6 Source HGNC Symbol Acc HGNC 16421
F12	UPFH0392206	ENST00000245479.3	SOX9	ENSG00000125398	SRY-box 9 Source HGNC Symbol Acc HGNC 11204
G01	UPFH1132843	ENST00000327443.9	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205
G02	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G03	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G04	UPFH0452979	ENST00000552726.1	TBX5	ENSG00000089225	T-box 5 Source HGNC Symbol Acc HGNC 11604
G05	UPFH0362567	ENST00000471721.1	TDGF1	ENSG00000241186	teratocarcinoma-derived growth factor 1 Source HGNC Symbol Acc HGNC 11701
G06	UPFH0248987	ENST00000310581.9	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G07	UPFH1125582	ENST00000296921.6	TLX3	ENSG00000164438	T cell leukemia homeobox 3 Source HGNC Symbol Acc HGNC 13532
G08	UPFH0608623	ENST00000550325.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G09	UPFH0298882	ENST00000298139.6	WRN	ENSG00000165392	Werner syndrome RecQ like helicase Source HGNC Symbol Acc HGNC 12791
G10	UPFH0122271	ENST00000527882.5	WT1	ENSG00000184937	Wilms tumor 1 Source HGNC Symbol Acc HGNC 12796
G11	UPFH0007169	ENST00000522160.1	ZFPM2	ENSG00000169946	zinc finger protein, FOG family member 2 Source HGNC Symbol Acc HGNC 16700
G12	UPFH0420811	ENST00000474034.1	ZIC1	ENSG00000152977	Zic family member 1 Source HGNC Symbol Acc HGNC 12872
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	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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