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

Human Neurogenesis

Cat. no. 249955 UPHS-404ZA

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ACHE	ADORA1	ADORA2A	ALK	APBB1	APOE	APP	ARTN	ASCL1	BCL2	BDNF	BMP2
B	BMP4	BMPBB	CDK5R1	CDK5RAP2	CHRM2	CREB1	CXCL1	DCX	DLG4	DLL1	DRD2	DVL3
C	EFNB1	EGF	EP300	ERBB2	FGF2	FLNA	GDNF	GPI	GRIN1	HDAC4	HES1	HEY1
D	HEY2	HEYL	IL3	MAP2	MDK	MEF2C	KMT2A	NDN	NDP	NEUROD1	NEUROG1	NEUROG2
E	NF1	NOG	NOTCH1	NOTCH2	NR2E3	NRCAM	NRG1	NRP1	NRP2	NTF3	NTN1	TENM1
F	OLIG2	PAFAH1B1	PARD3	PAX3	PAX5	PAX6	POU3F3	POU4F1	PTN	RAC1	ROBO1	RTN4
G	S100A6	S100B	SHH	SLIT2	SOD1	SOX2	SOX8	STAT3	TGFB1	TH	TNR	VEGFA
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	UPFH0057935	ENST00000419336.6	ACHE	ENSG00000087085	acetylcholinesterase (Cartwright blood group) Source HGNC Symbol Acc HGNC 108
A02	UPFH0471979	ENST00000467253.1	ADORA1	ENSG00000163485	adenosine A1 receptor Source HGNC Symbol Acc HGNC 262
A03	UPFH0043185	ENST00000467385.5	ADORA2A	ENSG00000128271	adenosine A2a receptor Source HGNC Symbol Acc HGNC 263
A04	UPFH0049779	ENST00000618119.4	ALK	ENSG00000171094	ALK receptor tyrosine kinase Source HGNC Symbol Acc HGNC 427
A05	UPFH0423011	ENST00000608394.5	APBB1	ENSG00000166313	amyloid beta precursor protein binding family B member 1 Source HGNC Symbol Acc HGNC 581
A06	UPFH0539669	ENST00000425718.1	APOE	ENSG00000130203	apolipoprotein E Source HGNC Symbol Acc HGNC 613
A07	UPFH1132238	ENST00000346798.8	APP	ENSG00000142192	amyloid beta precursor protein Source HGNC Symbol Acc HGNC 620
A08	UPFH0514076	ENST00000491846.5	ARTN	ENSG00000117407	artemin Source HGNC Symbol Acc HGNC 727
A09	UPFH0154999	ENST00000266744.4	ASCL1	ENSG00000139352	achaete-scute family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 738
A10	UPFH1132900	ENST00000333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A11	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A12	UPFH1132780	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
B01	UPFH0443169	ENST00000558984.1	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
B02	UPFH0580680	ENST00000372827.8	BMP8B	ENSG00000116985	bone morphogenetic protein 8b Source HGNC Symbol Acc HGNC 1075
B03	UPFH1132308	ENST00000313401.4	CDK5R1	ENSG00000176749	cyclin dependent kinase 5 regulatory subunit 1 Source HGNC Symbol Acc HGNC 1775
B04	UPFH0347793	ENST00000360822.7	CDK5RAP2	ENSG00000136861	CDK5 regulatory subunit associated protein 2 Source HGNC Symbol Acc HGNC 18672
B05	UPFH0583087	ENST00000453373.5	CHRM2	ENSG00000181072	cholinergic receptor muscarinic 2 Source HGNC Symbol Acc HGNC 1951
B06	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B07	UPFH0494346	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
B08	UPFH0182845	ENST00000488120.2	DCX	ENSG00000077279	doublecortin Source HGNC Symbol Acc HGNC 2714
B09	UPFH0068395	ENST00000649971.1	DLG4	ENSG00000132535	discs large MAGUK scaffold protein 4 Source HGNC Symbol Acc HGNC 2903
B10	UPFH0541475	ENST00000630500.1	DLL1	ENSG00000198719	delta like canonical Notch ligand 1 Source HGNC Symbol Acc HGNC 2908
B11	UPFH0281781	ENST00000540600.5	DRD2	ENSG00000149295	dopamine receptor D2 Source HGNC Symbol Acc HGNC 3023
B12	UPFH0284366	ENST00000423300.1	DVL3	ENSG00000161202	dishevelled segment polarity protein 3 Source HGNC Symbol Acc HGNC 3087
C01	UPFH0397795	ENST00000204961.5	EFNB1	ENSG00000090776	ephrin B1 Source HGNC Symbol Acc HGNC 3226
C02	UPFH1132380	ENST00000503392.1	EGF	ENSG00000138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
C03	UPFH0118049	ENST00000635691.1	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C04	UPFH1132388	ENST00000541774.5	ERBB2	ENSG00000141736	erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430
C05	UPFH0613093	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
C06	UPFH0017156	ENST00000498491.5	FLNA	ENSG00000196924	filamin A Source HGNC Symbol Acc HGNC 3754
C07	UPFH0398280	ENST00000510177.5	GDNF	ENSG00000168621	glial cell derived neurotrophic factor Source HGNC Symbol Acc HGNC 4232
C08	UPFH0554980	ENST00000644934.1	GPI	ENSG00000105220	glucose-6-phosphate isomerase Source HGNC Symbol Acc HGNC 4458
C09	UPFH0460129	ENST00000371561.8	GRIN1	ENSG00000176884	glutamate ionotropic receptor NMDA type subunit 1 Source HGNC Symbol Acc HGNC 4584
C10	UPFH0101499	ENST00000345617.7	HDAC4	ENSG00000068024	histone deacetylase 4 Source HGNC Symbol Acc HGNC 14063
		ENST00000232		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132442	424.4	HES1	114315	hes family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 5192
C12	UPFH1132444	ENST00000354724.8	HEY1	ENSG00000164683	hes related family bHLH transcription factor with YRPW motif 1 Source HGNC Symbol Acc HGNC 4880
D01	UPFH0601318	ENST00000368364.4	HEY2	ENSG00000135547	hes related family bHLH transcription factor with YRPW motif 2 Source HGNC Symbol Acc HGNC 4881
D02	UPFH1132445	ENST00000372852.4	HEYL	ENSG00000163909	hes related family bHLH transcription factor with YRPW motif-like Source HGNC Symbol Acc HGNC 4882
D03	UPFH0282899	ENST00000296870.2	IL3	ENSG00000164399	interleukin 3 Source HGNC Symbol Acc HGNC 6011
D04	UPFH0424834	ENST00000392193.5	MAP2	ENSG00000078018	microtubule associated protein 2 Source HGNC Symbol Acc HGNC 6839
D05	UPFH0255721	ENST00000395566.8	MDK	ENSG00000110492	midkine Source HGNC Symbol Acc HGNC 6972
D06	UPFH0170268	ENST00000424173.6	MEF2C	ENSG00000081189	myocyte enhancer factor 2C Source HGNC Symbol Acc HGNC 6996
D07	UPFH0455243	ENST00000534678.3	KMT2A	ENSG00000118058	lysine methyltransferase 2A Source HGNC Symbol Acc HGNC 7132
D08	UPFH0327594	ENST00000649030.1	NDN	ENSG00000182636	necdin, MAGE family member Source HGNC Symbol Acc HGNC 7675
D09	UPFH0506074	ENST00000378062.6	NDP	ENSG00000124479	NDP, norrin cystine knot growth factor Source HGNC Symbol Acc HGNC 7678
D10	UPFH0416171	ENST00000496876.1	NEUROD1	ENSG00000162992	neuronal differentiation 1 Source HGNC Symbol Acc HGNC 7762
D11	UPFH0230360	ENST00000314744.6	NEUROG1	ENSG00000181965	neurogenin 1 Source HGNC Symbol Acc HGNC 7764
D12	UPFH0379726	ENST00000313341.4	NEUROG2	ENSG00000178403	neurogenin 2 Source HGNC Symbol Acc HGNC 13805
E01	UPFH0158363	ENST00000431387.8	NF1	ENSG00000196712	neurofibromin 1 Source HGNC Symbol Acc HGNC 7765
E02	UPFH0273734	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
E03	UPFH0543837	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
E04	UPFH0591047	ENST00000640021.1	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E05	UPFH0283845	ENST00000621736.4	NR2E3	ENSG00000278570	nuclear receptor subfamily 2 group E member 3 Source HGNC Symbol Acc HGNC 7974
E06	UPFH0518882	ENST00000413765.6	NRCAM	ENSG00000091129	neuronal cell adhesion molecule Source HGNC Symbol Acc HGNC 7994
E07	UPFH0407423	ENST00000652592.1	NRG1	ENSG00000157168	neuregulin 1 Source HGNC Symbol Acc HGNC 7997
E08	UPFH1132598	ENST00000395995.5	NRP1	ENSG00000099250	neuropilin 1 Source HGNC Symbol Acc HGNC 8004
E09	UPFH1132599	ENST00000412873.2	NRP2	ENSG00000118257	neuropilin 2 Source HGNC Symbol Acc HGNC 8005
E10	UPFH0062043	ENST00000535299.5	NTF3	ENSG00000185652	neurotrophin 3 Source HGNC Symbol Acc HGNC 8023
E11	UPFH0611220	ENST00000173229.7	NTN1	ENSG00000065320	netrin 1 Source HGNC Symbol Acc HGNC 8029
E12	UPFH0324999	ENST00000461429.1	TENM1	ENSG00000009694	teneurin transmembrane protein 1 Source HGNC Symbol Acc HGNC 8117
F01	UPFH0058283	ENST00000382357.4	OLIG2	ENSG00000205927	oligodendrocyte transcription factor 2 Source HGNC Symbol Acc HGNC 9398
F02	UPFH0425356	ENST00000572915.6	PAFAH1B1	ENSG00000007168	platelet activating factor acetylhydrolase 1b regulatory subunit 1 Source HGNC Symbol Acc HGNC 8574
F03	UPFH0076865	ENST00000340077.9	PARD3	ENSG00000148498	par-3 family cell polarity regulator Source HGNC Symbol Acc HGNC 16051
F04	UPFH0068342	ENST00000647467.1	PAX3	ENSG00000135903	paired box 3 Source HGNC Symbol Acc HGNC 8617
F05	UPFH0136572	ENST00000522003.5	PAX5	ENSG00000196092	paired box 5 Source HGNC Symbol Acc HGNC 8619
F06	UPFH0078275	ENST00000638685.1	PAX6	ENSG00000007372	paired box 6 Source HGNC Symbol Acc HGNC 8620
F07	UPFH0480185	ENST00000361360.3	POU3F3	ENSG00000198914	POU class 3 homeobox 3 Source HGNC Symbol Acc HGNC 9216
F08	UPFH0435658	ENST00000377208.7	POU4F1	ENSG00000152192	POU class 4 homeobox 1 Source HGNC Symbol Acc HGNC 9218
F09	UPFH0287140	ENST00000348225.6	PTN	ENSG00000105894	pleiotrophin Source HGNC Symbol Acc HGNC 9630
F10	UPFH1132648	ENST00000348035.9	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0462487	ENST00000464233.6	ROBO1	ENSG00000169855	roundabout guidance receptor 1 Source HGNC Symbol Acc HGNC 10249
F12	UPFH0600182	ENST00000317610.11	RTN4	ENSG00000115310	reticulon 4 Source HGNC Symbol Acc HGNC 14085
G01	UPFH0516872	ENST00000462951.2	S100A6	ENSG00000197956	S100 calcium binding protein A6 Source HGNC Symbol Acc HGNC 10496
G02	UPFH0069870	ENST00000397648.1	S100B	ENSG00000160307	S100 calcium binding protein B Source HGNC Symbol Acc HGNC 10500
G03	UPFH0252724	ENST00000430104.5	SHH	ENSG00000164690	sonic hedgehog signaling molecule Source HGNC Symbol Acc HGNC 10848
G04	UPFH0037938	ENST00000509941.1	SLIT2	ENSG00000145147	slit guidance ligand 2 Source HGNC Symbol Acc HGNC 11086
G05	UPFH0220920	ENST00000270142.10	SOD1	ENSG00000142168	superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179
G06	UPFH0376428	ENST00000325404.3	SOX2	ENSG00000181449	SRY-box 2 Source HGNC Symbol Acc HGNC 11195
G07	UPFH0420052	ENST00000566034.1	SOX8	ENSG00000005513	SRY-box 8 Source HGNC Symbol Acc HGNC 11203
G08	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G09	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G10	UPFH0521066	ENST00000412076.1	TH	ENSG00000180176	tyrosine hydroxylase Source HGNC Symbol Acc HGNC 11782
G11	UPFH0384091	ENST00000422274.2	TNR	ENSG00000116147	tenascin R Source HGNC Symbol Acc HGNC 11953
G12	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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