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

Human Dopamine & Serotonin Pathway

Cat. no. 249955 UPHS-158ZA

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	ADCY1	ADCY2	ADCY3	ADCY5	ADRB1	ADRB2	GRK2	GRK3	AKT1	AKT2	AKT3	ALOX12
B	APP	ARRB1	ARRB2	BDNF	CASP3	CDK5	COMT	CREB1	CYP2D6	DBH	DDC	DRD1
C	DRD2	DRD3	DRD4	DRD5	DUSP1	EPHB1	FOS	GDNF	GFAP	GRK4	GRK5	GRK6
D	GSK3A	GSK3B	HTR1A	HTR1B	HTR1D	HTR1E	HTR1F	HTR2A	HTR2B	HTR2C	HTR3A	HTR3B
E	HTR4	HTR5A	HTR6	HTR7	ITPR1	MAOA	MAOB	MAPK1	NR4A1	NR4A3	PDE10A	PDE4A
F	PDE4B	AC008397.2	PDE4D	PDYN	PIK3CA	PIK3CG	PLA2G5	PLCB1	PLCB2	PLCB3	PPP1R1B	PRKACA
G	PTGS2	SLC18A1	SLC18A2	SLC6A3	SLC6A4	SNCA	SNCAIP	SYN2	TDO2	TH	TPH1	TPH2
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	UPFH0150062	ENST00000432715.5	ADCY1	ENSG00000164742	adenylate cyclase 1 Source HGNC Symbol Acc HGNC 232
A02	UPFH0599881	ENST00000493243.5	ADCY2	ENSG00000078295	adenylate cyclase 2 Source HGNC Symbol Acc HGNC 233
A03	UPFH0040651	ENST00000606682.5	ADCY3	ENSG00000138031	adenylate cyclase 3 Source HGNC Symbol Acc HGNC 234
A04	UPFH0264829	ENST00000468683.1	ADCY5	ENSG00000173175	adenylate cyclase 5 Source HGNC Symbol Acc HGNC 236
A05	UPFH0612978	ENST00000369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A06	UPFH0552004	ENST00000305988.5	ADRB2	ENSG00000169252	adrenoceptor beta 2 Source HGNC Symbol Acc HGNC 286
A07	UPFH0337015	ENST00000530291.5	GRK2	ENSG00000173020	G protein-coupled receptor kinase 2 Source HGNC Symbol Acc HGNC 289
A08	UPFH0487631	ENST00000324198.11	GRK3	ENSG00000100077	G protein-coupled receptor kinase 3 Source HGNC Symbol Acc HGNC 290
A09	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A10	UPFH0246744	ENST00000441941.6	AKT2	ENSG00000105221	AKT serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 392
A11	UPFH0198803	ENST00000336199.9	AKT3	ENSG00000117020	AKT serine/threonine kinase 3 Source HGNC Symbol Acc HGNC 393
A12	UPFH1132226	ENST00000251535.11	ALOX12	ENSG00000108839	arachidonate 12-lipoxygenase, 12S type Source HGNC Symbol Acc HGNC 429
B01	UPFH1132238	ENST00000346798.8	APP	ENSG00000142192	amyloid beta precursor protein Source HGNC Symbol Acc HGNC 620
B02	UPFH0570369	ENST00000529280.5	ARRB1	ENSG00000137486	arrestin beta 1 Source HGNC Symbol Acc HGNC 711
B03	UPFH0535152	ENST00000574502.5	ARRB2	ENSG00000141480	arrestin beta 2 Source HGNC Symbol Acc HGNC 712
B04	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
B05	UPFH1132892	ENST00000523916.5	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
B06	UPFH0609948	ENST00000485972.6	CDK5	ENSG00000164885	cyclin dependent kinase 5 Source HGNC Symbol Acc HGNC 1774
B07	UPFH0043531	ENST00000361682.10	COMT	ENSG00000093010	catechol-O-methyltransferase Source HGNC Symbol Acc HGNC 2228
B08	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B09	UPFH1124262	ENST00000645361.2	CYP2D6	ENSG00000100197	cytochrome P450 family 2 subfamily D member 6 Source HGNC Symbol Acc HGNC 2625
B10	UPFH0151477	ENST00000393056.7	DBH	ENSG00000123454	dopamine beta-hydroxylase Source HGNC Symbol Acc HGNC 2689
B11	UPFH0335012	ENST00000380984.4	DDC	ENSG00000132437	dopa decarboxylase Source HGNC Symbol Acc HGNC 2719
B12	UPFH0033353	ENST00000393752.3	DRD1	ENSG00000184845	dopamine receptor D1 Source HGNC Symbol Acc HGNC 3020
C01	UPFH0281781	ENST00000540600.5	DRD2	ENSG00000149295	dopamine receptor D2 Source HGNC Symbol Acc HGNC 3023
C02	UPFH0131168	ENST00000295881.9	DRD3	ENSG00000151577	dopamine receptor D3 Source HGNC Symbol Acc HGNC 3024
C03	UPFH0266941	ENST00000176183.5	DRD4	ENSG00000069696	dopamine receptor D4 Source HGNC Symbol Acc HGNC 3025
C04	UPFH0394985	ENST00000304374.3	DRD5	ENSG00000169676	dopamine receptor D5 Source HGNC Symbol Acc HGNC 3026
C05	UPFH1132372	ENST00000239223.4	DUSP1	ENSG00000120129	dual specificity phosphatase 1 Source HGNC Symbol Acc HGNC 3064
C06	UPFH0077620	ENST00000460895.5	EPHB1	ENSG00000154928	EPH receptor B1 Source HGNC Symbol Acc HGNC 3392
C07	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C08	UPFH0398280	ENST00000510177.5	GDNF	ENSG00000168621	glial cell derived neurotrophic factor Source HGNC Symbol Acc HGNC 4232
C09	UPFH0473904	ENST00000592320.6	GFAP	ENSG00000131095	glial fibrillary acidic protein Source HGNC Symbol Acc HGNC 4235
C10	UPFH0060142	ENST00000398051.8	GRK4	ENSG00000125388	G protein-coupled receptor kinase 4 Source HGNC Symbol Acc HGNC 4543
		ENST00000392		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0074805	870.2	GRK5	198873	G protein-coupled receptor kinase 5 Source HGNC Symbol Acc HGNC 4544
C12	UPFH0297105	ENST00000507633.5	GRK6	ENSG00000198055	G protein-coupled receptor kinase 6 Source HGNC Symbol Acc HGNC 4545
D01	UPFH1132428	ENST00000398249.8	GSK3A	ENSG00000105723	glycogen synthase kinase 3 alpha Source HGNC Symbol Acc HGNC 4616
D02	UPFH0470775	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
D03	UPFH0122721	ENST00000323865.4	HTR1A	ENSG00000178394	5-hydroxytryptamine receptor 1A Source HGNC Symbol Acc HGNC 5286
D04	UPFH0383158	ENST00000369947.4	HTR1B	ENSG00000135312	5-hydroxytryptamine receptor 1B Source HGNC Symbol Acc HGNC 5287
D05	UPFH0450767	ENST00000374619.1	HTR1D	ENSG00000179546	5-hydroxytryptamine receptor 1D Source HGNC Symbol Acc HGNC 5289
D06	UPFH0236667	ENST00000305344.7	HTR1E	ENSG00000168830	5-hydroxytryptamine receptor 1E Source HGNC Symbol Acc HGNC 5291
D07	UPFH0453086	ENST00000319595.5	HTR1F	ENSG00000179097	5-hydroxytryptamine receptor 1F Source HGNC Symbol Acc HGNC 5292
D08	UPFH0492753	ENST00000543956.4	HTR2A	ENSG00000102468	5-hydroxytryptamine receptor 2A Source HGNC Symbol Acc HGNC 5293
D09	UPFH0490592	ENST00000258400.4	HTR2B	ENSG00000135914	5-hydroxytryptamine receptor 2B Source HGNC Symbol Acc HGNC 5294
D10	UPFH0615463	ENST00000371951.5	HTR2C	ENSG00000147246	5-hydroxytryptamine receptor 2C Source HGNC Symbol Acc HGNC 5295
D11	UPFH0106689	ENST00000355556.6	HTR3A	ENSG00000166736	5-hydroxytryptamine receptor 3A Source HGNC Symbol Acc HGNC 5297
D12	UPFH0189080	ENST00000260191.7	HTR3B	ENSG00000149305	5-hydroxytryptamine receptor 3B Source HGNC Symbol Acc HGNC 5298
E01	UPFH0134397	ENST00000362016.6	HTR4	ENSG00000164270	5-hydroxytryptamine receptor 4 Source HGNC Symbol Acc HGNC 5299
E02	UPFH0243535	ENST00000287907.3	HTR5A	ENSG00000157219	5-hydroxytryptamine receptor 5A Source HGNC Symbol Acc HGNC 5300
E03	UPFH0555332	ENST00000289753.2	HTR6	ENSG00000158748	5-hydroxytryptamine receptor 6 Source HGNC Symbol Acc HGNC 5301
E04	UPFH0231778	ENST00000277874.10	HTR7	ENSG00000148680	5-hydroxytryptamine receptor 7 Source HGNC Symbol Acc HGNC 5302
E05	UPFH0126956	ENST00000649430.1	ITPR1	ENSG00000150995	inositol 1,4,5-trisphosphate receptor type 1 Source HGNC Symbol Acc HGNC 6180
E06	UPFH0432299	ENST00000338702.3	MAOA	ENSG00000189221	monoamine oxidase A Source HGNC Symbol Acc HGNC 6833
E07	UPFH0020129	ENST00000378069.5	MAOB	ENSG00000069535	monoamine oxidase B Source HGNC Symbol Acc HGNC 6834
E08	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E09	UPFH0094876	ENST00000550763.1	NR4A1	ENSG00000123358	nuclear receptor subfamily 4 group A member 1 Source HGNC Symbol Acc HGNC 7980
E10	UPFH0009540	ENST00000618101.4	NR4A3	ENSG00000119508	nuclear receptor subfamily 4 group A member 3 Source HGNC Symbol Acc HGNC 7982
E11	UPFH0088951	ENST00000366882.6	PDE10A	ENSG00000112541	phosphodiesterase 10A Source HGNC Symbol Acc HGNC 8772
E12	UPFH0244689	ENST00000591971.5	PDE4A	ENSG00000065989	phosphodiesterase 4A Source NCBI gene Acc 5141
F01	UPFH0302002	ENST00000534463.5	PDE4B	ENSG00000184588	phosphodiesterase 4B Source HGNC Symbol Acc HGNC 8781
F02	UPFH0252762	ENST00000355502.7	AC008397.2	ENSG00000285188	novel protein
F03	UPFH0123702	ENST00000621323.4	PDE4D	ENSG00000113448	phosphodiesterase 4D Source HGNC Symbol Acc HGNC 8783
F04	UPFH0279011	ENST00000651684.1	PDYN	ENSG00000101327	prodynorphin Source HGNC Symbol Acc HGNC 8820
F05	UPFH0109251	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
F06	UPFH0562261	ENST00000473541.5	PIK3CG	ENSG00000105851	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma Source HGNC Symbol Acc HGNC 8978
F07	UPFH0430356	ENST00000375108.4	PLA2G5	ENSG00000127472	phospholipase A2 group V Source HGNC Symbol Acc HGNC 9038
F08	UPFH0573286	ENST00000487210.5	PLCB1	ENSG00000182621	phospholipase C beta 1 Source HGNC Symbol Acc HGNC 15917
F09	UPFH0338480	ENST00000559634.1	PLCB2	ENSG00000137841	phospholipase C beta 2 Source HGNC Symbol Acc HGNC 9055
F10	UPFH0452293	ENST00000325234.5	PLCB3	ENSG00000149782	phospholipase C beta 3 Source HGNC Symbol Acc HGNC 9056

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0082595	ENST00000580029.1	PPP1R1B	ENSG00000131771	protein phosphatase 1 regulatory inhibitor subunit 1B Source HGNC Symbol Acc HGNC 9287
F12	UPFH0332354	ENST00000593092.1	PRKACA	ENSG00000072062	protein kinase cAMP-activated catalytic subunit alpha Source HGNC Symbol Acc HGNC 9380
G01	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
G02	UPFH0546937	ENST00000437980.3	SLC18A1	ENSG00000036565	solute carrier family 18 member A1 Source HGNC Symbol Acc HGNC 10934
G03	UPFH0518421	ENST00000298472.10	SLC18A2	ENSG00000165646	solute carrier family 18 member A2 Source HGNC Symbol Acc HGNC 10935
G04	UPFH0386633	ENST00000511750.1	SLC6A3	ENSG00000142319	solute carrier family 6 member 3 Source HGNC Symbol Acc HGNC 11049
G05	UPFH0504798	ENST00000394821.2	SLC6A4	ENSG00000108576	solute carrier family 6 member 4 Source HGNC Symbol Acc HGNC 11050
G06	UPFH0584453	ENST00000394991.7	SNCA	ENSG00000145335	synuclein alpha Source HGNC Symbol Acc HGNC 11138
G07	UPFH0138045	ENST00000508017.5	SNCAIP	ENSG00000064692	synuclein alpha interacting protein Source HGNC Symbol Acc HGNC 11139
G08	UPFH0089703	ENST00000620175.4	SYN2	ENSG00000157152	synapsin II Source HGNC Symbol Acc HGNC 11495
G09	UPFH0241455	ENST00000536354.3	TDO2	ENSG00000151790	tryptophan 2,3-dioxygenase Source HGNC Symbol Acc HGNC 11708
G10	UPFH0521066	ENST00000412076.1	TH	ENSG00000180176	tyrosine hydroxylase Source HGNC Symbol Acc HGNC 11782
G11	UPFH0399076	ENST00000250018.6	TPH1	ENSG00000129167	tryptophan hydroxylase 1 Source HGNC Symbol Acc HGNC 12008
G12	UPFH0202012	ENST00000550403.5	TPH2	ENSG00000139287	tryptophan hydroxylase 2 Source HGNC Symbol Acc HGNC 20692
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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