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

Human Synaptic Plasticity

Cat. no. 249955 UPHS-126ZR

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ADAM10	ADCY1	ADCY8	AKT1	ARC	BDNF	CAMK2A	CAMK2G	CDH2	CEBPB	CEBPD	CNR1
B	CREB1	CREM	DLG4	EGR1	EGR2	EGR3	EGR4	EPHB2	FOS	GABRA5	GNAI1	GRIA1
C	GRIA2	GRIA3	GRIA4	GRIN1	GRIN2A	GRIN2B	GRIN2C	GRIN2D	GRIP1	GRM1	GRM2	GRM3
D	GRM4	GRM5	GRM7	GRM8	HOMER1	IGF1	INHBA	JUN	JUNB	KIF17	KLF10	MAPK1
E	MMP9	NCAM1	NFKB1	NFKBIB	NGF	NGFR	NOS1	NPTX2	NR4A1	NTF3	NTF4	NTRK2
F	PCDH8	PICK1	PIM1	PLAT	PLCG1	PPP1CA	PPP1CC	PPP1R14A	PPP2CA	PPP3CA	PRKCA	PRKCG
G	PRKG1	RAB3A	RELA	RELN	RGS2	RHEB	SIRT1	SRF	SYNPO	TIMP1	TNF	YWHAQ
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	UPFH0535211	ENST00000481164.1	ADAM10	ENSG00000137845	ADAM metallopeptidase domain 10 Source HGNC Symbol Acc HGNC 188
A02	UPFH0150062	ENST00000432715.5	ADCY1	ENSG00000164742	adenylate cyclase 1 Source HGNC Symbol Acc HGNC 232
A03	UPFH0559465	ENST00000377928.7	ADCY8	ENSG00000155897	adenylate cyclase 8 Source HGNC Symbol Acc HGNC 239
A04	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A05	UPFH0369474	ENST00000356613.4	ARC	ENSG00000198576	activity regulated cytoskeleton associated protein Source HGNC Symbol Acc HGNC 648
A06	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A07	UPFH0197566	ENST00000398376.7	CAMK2A	ENSG00000070808	calcium/calmodulin dependent protein kinase II alpha Source HGNC Symbol Acc HGNC 1460
A08	UPFH0501608	ENST00000423381.5	CAMK2G	ENSG00000148660	calcium/calmodulin dependent protein kinase II gamma Source HGNC Symbol Acc HGNC 1463
A09	UPFH1132792	ENST00000399380.7	CDH2	ENSG00000170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
A10	UPFH0202295	ENST00000303004.4	CEBPB	ENSG00000172216	CCAAT enhancer binding protein beta Source HGNC Symbol Acc HGNC 1834
A11	UPFH0348961	ENST00000408965.3	CEBPD	ENSG00000221869	CCAAT enhancer binding protein delta Source HGNC Symbol Acc HGNC 1835
A12	UPFH0389304	ENST00000428600.2	CNR1	ENSG00000118432	cannabinoid receptor 1 Source HGNC Symbol Acc HGNC 2159
B01	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B02	UPFH0269005	ENST00000439705.5	CREM	ENSG00000095794	cAMP responsive element modulator Source HGNC Symbol Acc HGNC 2352
B03	UPFH0068395	ENST00000649971.1	DLG4	ENSG00000132535	discs large MAGUK scaffold protein 4 Source HGNC Symbol Acc HGNC 2903
B04	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
B05	UPFH0318489	ENST00000242480.4	EGR2	ENSG00000122877	early growth response 2 Source HGNC Symbol Acc HGNC 3239
B06	UPFH0445244	ENST00000522910.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
B07	UPFH0358060	ENST00000436467.3	EGR4	ENSG00000135625	early growth response 4 Source HGNC Symbol Acc HGNC 3241
B08	UPFH0385602	ENST00000465676.1	EPHB2	ENSG00000133216	EPH receptor B2 Source HGNC Symbol Acc HGNC 3393
B09	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
B10	UPFH0457490	ENST00000335625.10	GABRA5	ENSG00000186297	gamma-aminobutyric acid type A receptor alpha5 subunit Source HGNC Symbol Acc HGNC 4079
B11	UPFH0461499	ENST00000649485.1	GNAI1	ENSG00000127955	G protein subunit alpha i1 Source HGNC Symbol Acc HGNC 4384
B12	UPFH0113437	ENST00000448073.8	GRIA1	ENSG00000155511	glutamate ionotropic receptor AMPA type subunit 1 Source HGNC Symbol Acc HGNC 4571
C01	UPFH0500353	ENST00000505888.1	GRIA2	ENSG00000120251	glutamate ionotropic receptor AMPA type subunit 2 Source HGNC Symbol Acc HGNC 4572
C02	UPFH0324861	ENST00000620581.4	GRIA3	ENSG00000125675	glutamate ionotropic receptor AMPA type subunit 3 Source HGNC Symbol Acc HGNC 4573
C03	UPFH0085682	ENST00000527669.1	GRIA4	ENSG00000152578	glutamate ionotropic receptor AMPA type subunit 4 Source HGNC Symbol Acc HGNC 4574
C04	UPFH0460129	ENST00000371561.8	GRIN1	ENSG00000176884	glutamate ionotropic receptor NMDA type subunit 1 Source HGNC Symbol Acc HGNC 4584
C05	UPFH0484366	ENST00000562109.5	GRIN2A	ENSG00000183454	glutamate ionotropic receptor NMDA type subunit 2A Source HGNC Symbol Acc HGNC 4585
C06	UPFH0487402	ENST00000628166.1	GRIN2B	ENSG00000273079	glutamate ionotropic receptor NMDA type subunit 2B Source HGNC Symbol Acc HGNC 4586
C07	UPFH0497072	ENST00000293190.10	GRIN2C	ENSG00000161509	glutamate ionotropic receptor NMDA type subunit 2C Source HGNC Symbol Acc HGNC 4587
C08	UPFH0353267	ENST00000263269.3	GRIN2D	ENSG00000105464	glutamate ionotropic receptor NMDA type subunit 2D Source HGNC Symbol Acc HGNC 4588
C09	UPFH0510696	ENST00000540433.5	GRIP1	ENSG00000155974	glutamate receptor interacting protein 1 Source HGNC Symbol Acc HGNC 18708
C10	UPFH0087489	ENST00000282753.6	GRM1	ENSG00000152822	glutamate metabotropic receptor 1 Source HGNC Symbol Acc HGNC 4593
		ENST00000442		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0077091	933.2	GRM2	164082	glutamate metabotropic receptor 2 Source HGNC Symbol Acc HGNC 4594
C12	UPFH0572483	ENST00000439827.1	GRM3	ENSG00000198822	glutamate metabotropic receptor 3 Source HGNC Symbol Acc HGNC 4595
D01	UPFH0580909	ENST00000455714.6	GRM4	ENSG00000124493	glutamate metabotropic receptor 4 Source HGNC Symbol Acc HGNC 4596
D02	UPFH0485590	ENST00000305447.4	GRM5	ENSG00000168959	glutamate metabotropic receptor 5 Source HGNC Symbol Acc HGNC 4597
D03	UPFH0562819	ENST00000440923.7	GRM7	ENSG00000196277	glutamate metabotropic receptor 7 Source HGNC Symbol Acc HGNC 4599
D04	UPFH0125894	ENST00000472701.5	GRM8	ENSG00000179603	glutamate metabotropic receptor 8 Source HGNC Symbol Acc HGNC 4600
D05	UPFH0097912	ENST00000334082.10	HOMER1	ENSG00000152413	homer scaffold protein 1 Source HGNC Symbol Acc HGNC 17512
D06	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D07	UPFH1132486	ENST00000242208.5	INHBA	ENSG00000122641	inhibin subunit beta A Source HGNC Symbol Acc HGNC 6066
D08	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D09	UPFH1132504	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D10	UPFH0328358	ENST00000477167.5	KIF17	ENSG00000117245	kinesin family member 17 Source HGNC Symbol Acc HGNC 19167
D11	UPFH0526732	ENST00000395884.3	KLF10	ENSG00000155090	Kruppel like factor 10 Source HGNC Symbol Acc HGNC 11810
D12	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E01	UPFH0367626	ENST00000372330.3	MMP9	ENSG00000100985	matrix metallopeptidase 9 Source HGNC Symbol Acc HGNC 7176
E02	UPFH0013835	ENST00000531044.5	NCAM1	ENSG00000149294	neural cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 7656
E03	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E04	UPFH0504502	ENST00000572515.5	NFKBIB	ENSG00000104825	NFKB inhibitor beta Source HGNC Symbol Acc HGNC 7798
E05	UPFH0235569	ENST00000369512.2	NGF	ENSG00000134259	nerve growth factor Source HGNC Symbol Acc HGNC 7808
E06	UPFH0277610	ENST00000172229.8	NGFR	ENSG00000064300	nerve growth factor receptor Source HGNC Symbol Acc HGNC 7809
E07	UPFH0462204	ENST00000618760.4	NOS1	ENSG00000089250	nitric oxide synthase 1 Source HGNC Symbol Acc HGNC 7872
E08	UPFH0114793	ENST00000265634.4	NPTX2	ENSG00000106236	neuronal pentraxin 2 Source HGNC Symbol Acc HGNC 7953
E09	UPFH0094876	ENST00000550763.1	NR4A1	ENSG00000123358	nuclear receptor subfamily 4 group A member 1 Source HGNC Symbol Acc HGNC 7980
E10	UPFH0062043	ENST00000535299.5	NTF3	ENSG00000185652	neurotrophin 3 Source HGNC Symbol Acc HGNC 8023
E11	UPFH0326759	ENST00000594938.1	NTF4	ENSG00000225950	neurotrophin 4 Source HGNC Symbol Acc HGNC 8024
E12	UPFH0140055	ENST00000376208.5	NTRK2	ENSG00000148053	neurotrophic receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 8032
F01	UPFH0360152	ENST00000338862.5	PCDH8	ENSG00000136099	protocadherin 8 Source HGNC Symbol Acc HGNC 8660
F02	UPFH0036915	ENST00000466374.1	PICK1	ENSG00000100151	protein interacting with PRKCA 1 Source HGNC Symbol Acc HGNC 9394
F03	UPFH0211822	ENST00000479509.1	PIM1	ENSG00000137193	Pim-1 proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 8986
F04	UPFH1132830	ENST00000352041.7	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
F05	UPFH0088354	ENST00000617873.4	PLCG1	ENSG00000124181	phospholipase C gamma 1 Source HGNC Symbol Acc HGNC 9065
F06	UPFH0171644	ENST00000537694.1	PPP1CA	ENSG00000172531	protein phosphatase 1 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9281
F07	UPFH0257887	ENST00000551582.1	PPP1CC	ENSG00000186298	protein phosphatase 1 catalytic subunit gamma Source HGNC Symbol Acc HGNC 9283
F08	UPFH0272232	ENST00000301242.9	PPP1R14A	ENSG00000167641	protein phosphatase 1 regulatory inhibitor subunit 14A Source HGNC Symbol Acc HGNC 14871
F09	UPFH0120233	ENST00000522385.1	PPP2CA	ENSG00000113575	protein phosphatase 2 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9299
F10	UPFH0410648	ENST00000394854.8	PPP3CA	ENSG00000138814	protein phosphatase 3 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9314

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0607768	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F12	UPFH0047967	ENST00000474397.5	PRKCG	ENSG00000126583	protein kinase C gamma Source HGNC Symbol Acc HGNC 9402
G01	UPFH0398196	ENST00000373980.10	PRKG1	ENSG00000185532	protein kinase cGMP-dependent 1 Source HGNC Symbol Acc HGNC 9414
G02	UPFH0495735	ENST00000464076.3	RAB3A	ENSG00000105649	RAB3A, member RAS oncogene family Source HGNC Symbol Acc HGNC 9777
G03	UPFH1132884	ENST00000615805.4	RELA	ENSG00000173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
G04	UPFH0230624	ENST00000428762.6	RELN	ENSG00000189056	reelin Source HGNC Symbol Acc HGNC 9957
G05	UPFH1132656	ENST00000235382.7	RGS2	ENSG00000116741	regulator of G protein signaling 2 Source HGNC Symbol Acc HGNC 9998
G06	UPFH0068695	ENST00000472642.5	RHEB	ENSG00000106615	Ras homolog, mTORC1 binding Source HGNC Symbol Acc HGNC 10011
G07	UPFH0388476	ENST00000212015.11	SIRT1	ENSG00000096717	sirtuin 1 Source HGNC Symbol Acc HGNC 14929
G08	UPFH0179284	ENST00000265354.6	SRF	ENSG00000112658	serum response factor Source HGNC Symbol Acc HGNC 11291
G09	UPFH0419417	ENST00000394243.5	SYNPO	ENSG00000171992	synaptopodin Source HGNC Symbol Acc HGNC 30672
G10	UPFH1132725	ENST00000456754.6	TIMP1	ENSG00000102265	TIMP metallopeptidase inhibitor 1 Source HGNC Symbol Acc HGNC 11820
G11	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G12	UPFH0056437	ENST00000474715.1	YWHAQ	ENSG00000134308	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta Source HGNC Symbol Acc HGNC 12854
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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.