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

Human Synaptic Plasticity

Cat. no. 249950 SBHS-126ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

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

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0047492	ENST00000482945.5	ADAM10	ENSG00000137845	ADAM metallopeptidase domain 10 Source HGNC Symbol Acc HGNC 188
A02	SBH0029402	ENST00000646653.1	ADCY1	ENSG00000164742	adenylate cyclase 1 Source HGNC Symbol Acc HGNC 232
A03	SBH0374208	ENST00000522949.1	ADCY8	ENSG00000155897	adenylate cyclase 8 Source HGNC Symbol Acc HGNC 239
A04	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A05	SBH0191506	ENST00000581404.1	ARC	ENSG00000198576	activity regulated cytoskeleton associated protein Source HGNC Symbol Acc HGNC 648
A06	SBH0006040	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A07	SBH0641603	ENST00000508662.5	CAMK2A	ENSG00000070808	calcium/calmodulin dependent protein kinase II alpha Source HGNC Symbol Acc HGNC 1460
A08	SBH0045953	ENST00000372765.5	CAMK2G	ENSG00000148660	calcium/calmodulin dependent protein kinase II gamma Source HGNC Symbol Acc HGNC 1463
A09	SBH1219870	ENST00000269141.8	CDH2	ENSG00000170558	cadherin 2 Source HGNC Symbol Acc HGNC 1759
A10	SBH0569983	ENST00000303004.4	CEBPB	ENSG00000172216	CCAAT enhancer binding protein beta Source HGNC Symbol Acc HGNC 1834
A11	SBH0227697	ENST00000408965.3	CEBPD	ENSG00000221869	CCAAT enhancer binding protein delta Source HGNC Symbol Acc HGNC 1835
A12	SBH0064955	ENST00000428600.2	CNR1	ENSG00000118432	cannabinoid receptor 1 Source HGNC Symbol Acc HGNC 2159
B01	SBH0077258	ENST00000353267.8	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B02	SBH0192533	ENST00000474362.5	CREM	ENSG00000095794	cAMP responsive element modulator Source HGNC Symbol Acc HGNC 2352
B03	SBH0179092	ENST00000491753.2	DLG4	ENSG00000132535	discs large MAGUK scaffold protein 4 Source HGNC Symbol Acc HGNC 2903
B04	SBH0290504	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
B05	SBH0476440	ENST00000242480.4	EGR2	ENSG00000122877	early growth response 2 Source HGNC Symbol Acc HGNC 3239
B06	SBH0457320	ENST00000518773.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
B07	SBH0283184	ENST00000545030.1	EGR4	ENSG00000135625	early growth response 4 Source HGNC Symbol Acc HGNC 3241
B08	SBH0232284	ENST00000490436.1	EPHB2	ENSG00000133216	EPH receptor B2 Source HGNC Symbol Acc HGNC 3393
B09	SBH1220004	ENST00000554617.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
B10	SBH0316016	ENST00000400081.7	GABRA5	ENSG00000186297	gamma-aminobutyric acid type A receptor alpha5 subunit Source HGNC Symbol Acc HGNC 4079
B11	SBH0569826	ENST00000649922.1	GNAI1	ENSG00000127955	G protein subunit alpha i1 Source HGNC Symbol Acc HGNC 4384
B12	SBH0142065	ENST00000518783.1	GRIA1	ENSG00000155511	glutamate ionotropic receptor AMPA type subunit 1 Source HGNC Symbol Acc HGNC 4571
C01	SBH0300551	ENST00000296526.12	GRIA2	ENSG00000120251	glutamate ionotropic receptor AMPA type subunit 2 Source HGNC Symbol Acc HGNC 4572
C02	SBH0052841	ENST00000611689.4	GRIA3	ENSG00000125675	glutamate ionotropic receptor AMPA type subunit 3 Source HGNC Symbol Acc HGNC 4573
C03	SBH0329384	ENST00000428631.6	GRIA4	ENSG00000152578	glutamate ionotropic receptor AMPA type subunit 4 Source HGNC Symbol Acc HGNC 4574
C04	SBH0229177	ENST00000371559.8	GRIN1	ENSG00000176884	glutamate ionotropic receptor NMDA type subunit 1 Source HGNC Symbol Acc HGNC 4584
C05	SBH0503624	ENST00000636273.1	GRIN2A	ENSG00000183454	glutamate ionotropic receptor NMDA type subunit 2A Source HGNC Symbol Acc HGNC 4585
C06	SBH0549412	ENST00000609686.3	GRIN2B	ENSG00000273079	glutamate ionotropic receptor NMDA type subunit 2B Source HGNC Symbol Acc HGNC 4586
C07	SBH0499611	ENST00000347612.4	GRIN2C	ENSG00000161509	glutamate ionotropic receptor NMDA type subunit 2C Source HGNC Symbol Acc HGNC 4587
C08	SBH0258923	ENST00000263269.3	GRIN2D	ENSG00000105464	glutamate ionotropic receptor NMDA type subunit 2D Source HGNC Symbol Acc HGNC 4588
C09	SBH0205492	ENST00000398016.7	GRIP1	ENSG00000155974	glutamate receptor interacting protein 1 Source HGNC Symbol Acc HGNC 18708
C10	SBH0643522	ENST00000492807.6	GRM1	ENSG00000152822	glutamate metabotropic receptor 1 Source HGNC Symbol Acc HGNC 4593
		ENST00000395		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0444663	052.8	GRM2	164082	glutamate metabotropic receptor 2 Source HGNC Symbol Acc HGNC 4594
C12	SBH0507437	ENST00000361669.6	GRM3	ENSG00000198822	glutamate metabotropic receptor 3 Source HGNC Symbol Acc HGNC 4595
D01	SBH0500018	ENST00000609278.1	GRM4	ENSG00000124493	glutamate metabotropic receptor 4 Source HGNC Symbol Acc HGNC 4596
D02	SBH0239510	ENST00000305432.9	GRM5	ENSG00000168959	glutamate metabotropic receptor 5 Source HGNC Symbol Acc HGNC 4597
D03	SBH0235729	ENST00000445087.1	GRM7	ENSG00000196277	glutamate metabotropic receptor 7 Source HGNC Symbol Acc HGNC 4599
D04	SBH0321111	ENST00000339582.6	GRM8	ENSG00000179603	glutamate metabotropic receptor 8 Source HGNC Symbol Acc HGNC 4600
D05	SBH0362077	ENST00000535690.1	HOMER1	ENSG00000152413	homer scaffold protein 1 Source HGNC Symbol Acc HGNC 17512
D06	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D07	SBH1220116	ENST00000242208.5	INHBA	ENSG00000122641	inhibin subunit beta A Source HGNC Symbol Acc HGNC 6066
D08	SBH0613340	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D09	SBH1220143	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D10	SBH0364573	ENST00000462858.5	KIF17	ENSG00000117245	kinesin family member 17 Source HGNC Symbol Acc HGNC 19167
D11	SBH0223155	ENST00000285407.11	KLF10	ENSG00000155090	Kruppel like factor 10 Source HGNC Symbol Acc HGNC 11810
D12	SBH1220192	ENST00000544786.1	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E01	SBH0471278	ENST00000372330.3	MMP9	ENSG00000100985	matrix metallopeptidase 9 Source HGNC Symbol Acc HGNC 7176
E02	SBH1220236	ENST00000618266.4	NCAM1	ENSG00000149294	neural cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 7656
E03	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E04	SBH0044332	ENST00000509705.3	NFKBIB	ENSG00000104825	NFKB inhibitor beta Source HGNC Symbol Acc HGNC 7798
E05	SBH0318562	ENST00000369512.2	NGF	ENSG00000134259	nerve growth factor Source HGNC Symbol Acc HGNC 7808
E06	SBH0556664	ENST00000504201.1	NGFR	ENSG00000064300	nerve growth factor receptor Source HGNC Symbol Acc HGNC 7809
E07	SBH0001706	ENST00000317775.11	NOS1	ENSG00000089250	nitric oxide synthase 1 Source HGNC Symbol Acc HGNC 7872
E08	SBH0271839	ENST00000265634.4	NPTX2	ENSG00000106236	neuronal pentraxin 2 Source HGNC Symbol Acc HGNC 7953
E09	SBH0110115	ENST00000550763.1	NR4A1	ENSG00000123358	nuclear receptor subfamily 4 group A member 1 Source HGNC Symbol Acc HGNC 7980
E10	SBH0012802	ENST00000543548.1	NTF3	ENSG00000185652	neurotrophin 3 Source HGNC Symbol Acc HGNC 8023
E11	SBH0261499	ENST00000593537.1	NTF4	ENSG00000225950	neurotrophin 4 Source HGNC Symbol Acc HGNC 8024
E12	SBH0629742	ENST00000277120.7	NTRK2	ENSG00000148053	neurotrophic receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 8032
F01	SBH0547534	ENST00000338862.5	PCDH8	ENSG00000136099	protocadherin 8 Source HGNC Symbol Acc HGNC 8660
F02	SBH0561068	ENST00000484021.5	PICK1	ENSG00000100151	protein interacting with PRKCA 1 Source HGNC Symbol Acc HGNC 9394
F03	SBH0087580	ENST00000468243.5	PIM1	ENSG00000137193	Pim-1 proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 8986
F04	SBH0432338	ENST00000220809.8	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
F05	SBH0415853	ENST00000608689.5	PLCG1	ENSG00000124181	phospholipase C gamma 1 Source HGNC Symbol Acc HGNC 9065
F06	SBH0657387	ENST00000532446.5	PPP1CA	ENSG00000172531	protein phosphatase 1 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9281
F07	SBH0652905	ENST00000335007.9	PPP1CC	ENSG00000186298	protein phosphatase 1 catalytic subunit gamma Source HGNC Symbol Acc HGNC 9283
F08	SBH0337812	ENST00000587515.5	PPP1R14A	ENSG00000167641	protein phosphatase 1 regulatory inhibitor subunit 14A Source HGNC Symbol Acc HGNC 14871
F09	SBH0088930	ENST00000522385.1	PPP2CA	ENSG00000113575	protein phosphatase 2 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9299
F10	SBH0472618	ENST00000394854.8	PPP3CA	ENSG00000138814	protein phosphatase 3 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9314

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0105563	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F12	SBH0670634	ENST00000419486.1	PRKCG	ENSG00000126583	protein kinase C gamma Source HGNC Symbol Acc HGNC 9402
G01	SBH0000909	ENST00000645324.1	PRKG1	ENSG00000185532	protein kinase cGMP-dependent 1 Source HGNC Symbol Acc HGNC 9414
G02	SBH0496396	ENST00000464076.3	RAB3A	ENSG00000105649	RAB3A, member RAS oncogene family Source HGNC Symbol Acc HGNC 9777
G03	SBH1220363	ENST00000532999.5	RELA	ENSG00000173039	RELA proto-oncogene, NF-kB subunit Source HGNC Symbol Acc HGNC 9955
G04	SBH0121539	ENST00000428762.6	RELN	ENSG00000189056	reelin Source HGNC Symbol Acc HGNC 9957
G05	SBH1220366	ENST00000235382.7	RGS2	ENSG00000116741	regulator of G protein signaling 2 Source HGNC Symbol Acc HGNC 9998
G06	SBH0210154	ENST00000478470.5	RHEB	ENSG00000106615	Ras homolog, mTORC1 binding Source HGNC Symbol Acc HGNC 10011
G07	SBH1220398	ENST00000212015.11	SIRT1	ENSG00000096717	sirtuin 1 Source HGNC Symbol Acc HGNC 14929
G08	SBH0145486	ENST00000265354.6	SRF	ENSG00000112658	serum response factor Source HGNC Symbol Acc HGNC 11291
G09	SBH0234644	ENST00000307662.5	SYNPO	ENSG00000171992	synaptopodin Source HGNC Symbol Acc HGNC 30672
G10	SBH1220454	ENST00000218388.9	TIMP1	ENSG00000102265	TIMP metallopeptidase inhibitor 1 Source HGNC Symbol Acc HGNC 11820
G11	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G12	SBH0646571	ENST00000474715.1	YWHAQ	ENSG00000134308	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta Source HGNC Symbol Acc HGNC 12854
H01	SBH1220543	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	SBH1220550	ENST00000558401.6	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	SBH1220545	ENST00000396861.5	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	SBH1220546	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	SBH1220553	ENST00000546989.5	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	SBH1218553	Sybr_HGDC	HGDC	Sybr_HGDC	Human Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA 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.