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

Human Neurogenesis

Cat. no. 249950 SBHS-404ZR

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	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 PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0162921	ENST00000440755.5	ACHE	ENSG00000087085	acetylcholinesterase (Cartwright blood group) Source HGNC Symbol Acc HGNC 108
A02	SBH0029645	ENST00000337894.9	ADORA1	ENSG00000163485	adenosine A1 receptor Source HGNC Symbol Acc HGNC 262
A03	SBH0613178	ENST00000467385.5	ADORA2A	ENSG00000128271	adenosine A2a receptor Source HGNC Symbol Acc HGNC 263
A04	SBH0300392	ENST00000642122.1	ALK	ENSG00000171094	ALK receptor tyrosine kinase Source HGNC Symbol Acc HGNC 427
A05	SBH0163775	ENST00000618005.4	APBB1	ENSG00000166313	amyloid beta precursor protein binding family B member 1 Source HGNC Symbol Acc HGNC 581
A06	SBH0562930	ENST00000434152.5	APOE	ENSG00000130203	apolipoprotein E Source HGNC Symbol Acc HGNC 613
A07	SBH1219749	ENST00000348990.9	APP	ENSG00000142192	amyloid beta precursor protein Source HGNC Symbol Acc HGNC 620
A08	SBH0038959	ENST00000414809.7	ARTN	ENSG00000117407	artemin Source HGNC Symbol Acc HGNC 727
A09	SBH0664239	ENST00000266744.4	ASCL1	ENSG00000139352	achaete-scute family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 738
A10	SBH1219786	ENST00000398117.1	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A11	SBH0006040	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A12	SBH1219802	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
B01	SBH0613995	ENST00000417573.5	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
B02	SBH0222101	ENST00000372827.8	BMP8B	ENSG00000116985	bone morphogenetic protein 8b Source HGNC Symbol Acc HGNC 1075
B03	SBH1219874	ENST00000313401.4	CDK5R1	ENSG00000176749	cyclin dependent kinase 5 regulatory subunit 1 Source HGNC Symbol Acc HGNC 1775
B04	SBH0586517	ENST00000360822.7	CDK5RAP2	ENSG00000136861	CDK5 regulatory subunit associated protein 2 Source HGNC Symbol Acc HGNC 18672
B05	SBH0006808	ENST00000401861.1	CHRM2	ENSG00000181072	cholinergic receptor muscarinic 2 Source HGNC Symbol Acc HGNC 1951
B06	SBH0077258	ENST00000353267.8	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B07	SBH0404660	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
B08	SBH0382691	ENST00000488120.2	DCX	ENSG00000077279	doublecortin Source HGNC Symbol Acc HGNC 2714
B09	SBH0179092	ENST00000491753.2	DLG4	ENSG00000132535	discs large MAGUK scaffold protein 4 Source HGNC Symbol Acc HGNC 2903
B10	SBH0070314	ENST00000630500.1	DLL1	ENSG00000198719	delta like canonical Notch ligand 1 Source HGNC Symbol Acc HGNC 2908
B11	SBH0344008	ENST00000535984.1	DRD2	ENSG00000149295	dopamine receptor D2 Source HGNC Symbol Acc HGNC 3023
B12	SBH0071963	ENST00000313143.9	DVL3	ENSG00000161202	dishevelled segment polarity protein 3 Source HGNC Symbol Acc HGNC 3087
C01	SBH0537762	ENST00000204961.5	EFNB1	ENSG00000090776	ephrin B1 Source HGNC Symbol Acc HGNC 3226
C02	SBH0321686	ENST00000265171.9	EGF	ENSG00000138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
C03	SBH1219977	ENST00000263253.9	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C04	SBH0056013	ENST00000269571.9	ERBB2	ENSG00000141736	erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430
C05	SBH1220000	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
C06	SBH0353138	ENST00000360319.9	FLNA	ENSG00000196924	filamin A Source HGNC Symbol Acc HGNC 3754
C07	SBH0310916	ENST00000502572.1	GDNF	ENSG00000168621	glial cell derived neurotrophic factor Source HGNC Symbol Acc HGNC 4232
C08	SBH1220031	ENST00000644934.1	GPI	ENSG00000105220	glucose-6-phosphate isomerase Source HGNC Symbol Acc HGNC 4458
C09	SBH0229177	ENST00000371559.8	GRIN1	ENSG00000176884	glutamate ionotropic receptor NMDA type subunit 1 Source HGNC Symbol Acc HGNC 4584
C10	SBH0538846	ENST00000345617.7	HDAC4	ENSG00000068024	histone deacetylase 4 Source HGNC Symbol Acc HGNC 14063
		ENST00000232		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220054	424.4	HES1	114315	hes family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 5192
C12	SBH1220056	ENST00000518733.1	HEY1	ENSG00000164683	hes related family bHLH transcription factor with YRPW motif 1 Source HGNC Symbol Acc HGNC 4880
D01	SBH0153374	ENST00000368365.5	HEY2	ENSG00000135547	hes related family bHLH transcription factor with YRPW motif 2 Source HGNC Symbol Acc HGNC 4881
D02	SBH1220057	ENST00000372852.4	HEYL	ENSG00000163909	hes related family bHLH transcription factor with YRPW motif-like Source HGNC Symbol Acc HGNC 4882
D03	SBH0584080	ENST00000296870.2	IL3	ENSG00000164399	interleukin 3 Source HGNC Symbol Acc HGNC 6011
D04	SBH0000648	ENST00000361559.8	MAP2	ENSG00000078018	microtubule associated protein 2 Source HGNC Symbol Acc HGNC 6839
D05	SBH0046663	ENST00000395566.8	MDK	ENSG00000110492	midkine Source HGNC Symbol Acc HGNC 6972
D06	SBH0475014	ENST00000625585.2	MEF2C	ENSG00000081189	myocyte enhancer factor 2C Source HGNC Symbol Acc HGNC 6996
D07	SBH1220153	ENST00000389506.10	KMT2A	ENSG00000118058	lysine methyltransferase 2A Source HGNC Symbol Acc HGNC 7132
D08	SBH0400822	ENST00000649030.1	NDN	ENSG00000182636	necdin, MAGE family member Source HGNC Symbol Acc HGNC 7675
D09	SBH0209223	ENST00000470584.1	NDP	ENSG00000124479	NDP, norrin cystine knot growth factor Source HGNC Symbol Acc HGNC 7678
D10	SBH0212925	ENST00000295108.3	NEUROD1	ENSG00000162992	neuronal differentiation 1 Source HGNC Symbol Acc HGNC 7762
D11	SBH0042183	ENST00000314744.6	NEUROG1	ENSG00000181965	neurogenin 1 Source HGNC Symbol Acc HGNC 7764
D12	SBH0511587	ENST00000313341.4	NEUROG2	ENSG00000178403	neurogenin 2 Source HGNC Symbol Acc HGNC 13805
E01	SBH0472829	ENST00000358273.8	NF1	ENSG00000196712	neurofibromin 1 Source HGNC Symbol Acc HGNC 7765
E02	SBH0651509	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
E03	SBH0615258	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
E04	SBH0378554	ENST00000256646.7	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E05	SBH0636774	ENST00000621098.1	NR2E3	ENSG00000278570	nuclear receptor subfamily 2 group E member 3 Source HGNC Symbol Acc HGNC 7974
E06	SBH0603284	ENST00000413765.6	NRCAM	ENSG00000091129	neuronal cell adhesion molecule Source HGNC Symbol Acc HGNC 7994
E07	SBH0274670	ENST00000652592.1	NRG1	ENSG00000157168	neuregulin 1 Source HGNC Symbol Acc HGNC 7997
E08	SBH1220281	ENST00000374823.9	NRP1	ENSG00000099250	neuropilin 1 Source HGNC Symbol Acc HGNC 8004
E09	SBH0541562	ENST00000357785.9	NRP2	ENSG00000118257	neuropilin 2 Source HGNC Symbol Acc HGNC 8005
E10	SBH0012802	ENST00000543548.1	NTF3	ENSG00000185652	neurotrophin 3 Source HGNC Symbol Acc HGNC 8023
E11	SBH0272505	ENST00000173229.7	NTN1	ENSG00000065320	netrin 1 Source HGNC Symbol Acc HGNC 8029
E12	SBH0431187	ENST00000461429.1	TENM1	ENSG00000009694	teneurin transmembrane protein 1 Source HGNC Symbol Acc HGNC 8117
F01	SBH0642856	ENST00000333337.3	OLIG2	ENSG00000205927	oligodendrocyte transcription factor 2 Source HGNC Symbol Acc HGNC 9398
F02	SBH0153141	ENST00000571495.1	PAFAH1B1	ENSG00000007168	platelet activating factor acetylhydrolase 1b regulatory subunit 1 Source HGNC Symbol Acc HGNC 8574
F03	SBH0638795	ENST00000374789.8	PARD3	ENSG00000148498	par-3 family cell polarity regulator Source HGNC Symbol Acc HGNC 16051
F04	SBH0015205	ENST00000392070.6	PAX3	ENSG00000135903	paired box 3 Source HGNC Symbol Acc HGNC 8617
F05	SBH0623717	ENST00000520281.5	PAX5	ENSG00000196092	paired box 5 Source HGNC Symbol Acc HGNC 8619
F06	SBH0042496	ENST00000533333.5	PAX6	ENSG00000007372	paired box 6 Source HGNC Symbol Acc HGNC 8620
F07	SBH0177395	ENST00000361360.3	POU3F3	ENSG00000198914	POU class 3 homeobox 3 Source HGNC Symbol Acc HGNC 9216
F08	SBH0664038	ENST00000377208.7	POU4F1	ENSG00000152192	POU class 4 homeobox 1 Source HGNC Symbol Acc HGNC 9218
F09	SBH0080420	ENST00000348225.6	PTN	ENSG00000105894	pleiotrophin Source HGNC Symbol Acc HGNC 9630
F10	SBH1220352	ENST00000356142.4	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0581189	ENST00000484514.1	ROBO1	ENSG00000169855	roundabout guidance receptor 1 Source HGNC Symbol Acc HGNC 10249
F12	SBH0428400	ENST00000486085.5	RTN4	ENSG00000115310	reticulon 4 Source HGNC Symbol Acc HGNC 14085
G01	SBH0242143	ENST00000496817.5	S100A6	ENSG00000197956	S100 calcium binding protein A6 Source HGNC Symbol Acc HGNC 10496
G02	SBH0183139	ENST00000291700.9	S100B	ENSG00000160307	S100 calcium binding protein B Source HGNC Symbol Acc HGNC 10500
G03	SBH0041689	ENST00000430104.5	SHH	ENSG00000164690	sonic hedgehog signaling molecule Source HGNC Symbol Acc HGNC 10848
G04	SBH0363286	ENST00000504154.6	SLIT2	ENSG00000145147	slit guidance ligand 2 Source HGNC Symbol Acc HGNC 11086
G05	SBH0278498	ENST00000270142.10	SOD1	ENSG00000142168	superoxide dismutase 1 Source HGNC Symbol Acc HGNC 11179
G06	SBH0499815	ENST00000325404.3	SOX2	ENSG00000181449	SRY-box 2 Source HGNC Symbol Acc HGNC 11195
G07	SBH0096379	ENST00000566034.1	SOX8	ENSG00000005513	SRY-box 8 Source HGNC Symbol Acc HGNC 11203
G08	SBH0341614	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G09	SBH1220443	ENST00000598758.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G10	SBH0245945	ENST00000412076.1	TH	ENSG00000180176	tyrosine hydroxylase Source HGNC Symbol Acc HGNC 11782
G11	SBH0411127	ENST00000422274.2	TNR	ENSG00000116147	tenascin R Source HGNC Symbol Acc HGNC 11953
G12	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
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.