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

Rat Neurogenesis

Cat. no. 249950 SBRN-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	Bmp8a	Cdk5r1	Cdk5rap2	Chat	Chrm2	Creb1	Cxcl1	Dcx	Dlg4	Dll1	Drd2
C	Dvl3	Efnb1	Egf	AABR07058539.1	Erbb2	Fgf2	Flna	Gdnf	Gpi	Grin1	Hdac4	Hes1
D	Hey1	Hey2	Heyl	Il3	Lif	Map2	Mdk	Mef2c	Kmt2a	Ndn	LOC100909913	Neurod1
E	Neurog1	Neurog2	Nf1	Nog	Notch1	Notch2	Nrcam	Nrg1	Nrp1	Nrp2	Ntf3	Ntn1
F	Olig2	Pafah1b1	Pard3	Pax2	Pax3	Pax6	Pou3f3	Pou4f1	Ptn	Rac1	Robo1	Rtn4
G	S100a6	S100b	Shh	Slit2	Sod1	Sox2	Sox8	Stat3	Tgfb1	Th	Tnr	Vegfa
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1117859	ENSRNOT00000086915.1	Ache	ENSRNOG00000050841	acetylcholinesterase Source RGD Symbol Acc 69313
A02	SBR1147673	ENSRNOT00000078993.1	Adora1	ENSRNOG00000003442	adenosine A1 receptor Source RGD Symbol Acc 2048
A03	SBR1138696	ENSRNOT00000001759.3	Adora2a	ENSRNOG00000001302	adenosine A2a receptor Source RGD Symbol Acc 2049
A04	SBR1152634	ENSRNOT00000011630.6	Alk	ENSRNOG00000008683	ALK receptor tyrosine kinase Source RGD Symbol Acc 628622
A05	SBR1106924	ENSRNOT00000090181.1	Apbb1	ENSRNOG00000018020	amyloid beta precursor protein binding family B member 1 Source RGD Symbol Acc 2122
A06	SBR1123572	ENSRNOT00000080453.1	Apoe	ENSRNOG00000018454	apolipoprotein E Source RGD Symbol Acc 2138
A07	SBR1129904	ENSRNOT00000048854.6	App	ENSRNOG00000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
A08	SBR1133613	ENSRNOT00000026852.3	Artn	ENSRNOG00000019842	artemin Source RGD Symbol Acc 621427
A09	SBR1118286	ENSRNOT00000005674.5	Ascl1	ENSRNOG00000004294	achaete-scute family bHLH transcription factor 1 Source RGD Symbol Acc 71010
A10	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG00000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A11	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG00000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A12	SBR1127251	ENSRNOT00000028904.4	Bmp2	ENSRNOG00000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
B01	SBR1132271	ENSRNOT00000012957.6	Bmp4	ENSRNOG00000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
B02	SBR1111676	ENSRNOT00000045922.2	Bmp8a	ENSRNOG00000030155	bone morphogenetic protein 8a Source RGD Symbol Acc 1585858
B03	SBR1197371	ENSRNOT00000031746.2	Cdk5r1	ENSRNOG00000021685	cyclin-dependent kinase 5 regulatory subunit 1 Source RGD Symbol Acc 629472
B04	SBR1110604	ENSRNOT00000007710.6	Cdk5rap2	ENSRNOG00000005788	CDK5 regulatory subunit associated protein 2 Source RGD Symbol Acc 708451
B05	SBR1117129	ENSRNOT00000034283.6	Chat	ENSRNOG00000025012	choline O-acetyltransferase Source RGD Symbol Acc 1304627
B06	SBR1157846	ENSRNOT00000075341.2	Chrm2	ENSRNOG00000046972	cholinergic receptor, muscarinic 2 Source RGD Symbol Acc 620023
B07	SBR1179341	ENSRNOT00000049654.4	Creb1	ENSRNOG00000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B08	SBR1198580	ENSRNOT00000003778.3	Cxcl1	ENSRNOG00000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B09	SBR1096235	ENSRNOT00000074322.1	Dcx	ENSRNOG00000047712	doublecortin Source RGD Symbol Acc 620670
B10	SBR1114299	ENSRNOT00000068493.2	Dlg4	ENSRNOG00000018526	discs large MAGUK scaffold protein 4 Source RGD Symbol Acc 68424
B11	SBR1168167	ENSRNOT00000080429.1	Dll1	ENSRNOG00000059984	delta like canonical Notch ligand 1 Source RGD Symbol Acc 70949
B12	SBR1132727	ENSRNOT00000083419.1	Drd2	ENSRNOG00000008428	dopamine receptor D2 Source RGD Symbol Acc 2520
C01	SBR1191691	ENSRNOT00000002323.6	Dvl3	ENSRNOG00000001708	dishevelled segment polarity protein 3 Source RGD Symbol Acc 1308834
C02	SBR1138402	ENSRNOT00000009635.6	Efnb1	ENSRNOG00000006877	ephrin B1 Source RGD Symbol Acc 2540
C03	SBR1200927	ENSRNOT00000087007.1	Egf	ENSRNOG00000053979	epidermal growth factor Source RGD Symbol Acc 2542
C04	SBR1104886	ENSRNOT00000000206.7	AABR07058539.1	ENSRNOG00000000190	
C05	SBR1175639	ENSRNOT00000049070.3	Erbb2	ENSRNOG00000006450	erb-b2 receptor tyrosine kinase 2 Source RGD Symbol Acc 2561
C06	SBR1185708	ENSRNOT00000023388.5	Fgf2	ENSRNOG00000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C07	SBR1201602	ENSRNOT00000079889.1	Flna	ENSRNOG00000054890	filamin A Source RGD Symbol Acc 1560614
C08	SBR1188150	ENSRNOT00000041288.2	Gdnf	ENSRNOG00000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
C09	SBR1214960	ENSRNOT00000032613.4	Gpi	ENSRNOG00000023150	glucose-6-phosphate isomerase Source RGD Symbol Acc 2727
C10	SBR1215394	ENSRNOT00000044246.4	Grin1	ENSRNOG00000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1137239	027622.6	Hdac4	000020372	histone deacetylase 4 Source RGD Symbol Acc 619979
C12	SBR1103177	ENSRNOT00000002346.7	Hes1	ENSRNOG00000001720	hes family bHLH transcription factor 1 Source RGD Symbol Acc 62081
D01	SBR1112803	ENSRNOT00000015537.7	Hey1	ENSRNOG00000011593	hes-related family bHLH transcription factor with YRPW motif 1 Source NCBI gene Acc 155437
D02	SBR1143993	ENSRNOT00000018718.6	Hey2	ENSRNOG00000013364	hes-related family bHLH transcription factor with YRPW motif 2 Source RGD Symbol Acc 621405
D03	SBR1124485	ENSRNOT00000020929.3	Heyl	ENSRNOG00000015318	hes-related family bHLH transcription factor with YRPW motif-like Source RGD Symbol Acc 1305022
D04	SBR1198875	ENSRNOT00000031762.1	Il3	ENSRNOG00000026786	interleukin 3 Source RGD Symbol Acc 2897
D05	SBR1155933	ENSRNOT00000009313.4	Lif	ENSRNOG00000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
D06	SBR1110892	ENSRNOT00000092445.1	Map2	ENSRNOG00000011841	microtubule-associated protein 2 Source RGD Symbol Acc 3044
D07	SBR1178481	ENSRNOT00000033978.3	Mdk	ENSRNOG00000017560	midkine Source RGD Symbol Acc 69073
D08	SBR1120063	ENSRNOT00000076710.2	Mef2c	ENSRNOG00000033134	myocyte enhancer factor 2C Source RGD Symbol Acc 1563119
D09	SBR1120968	ENSRNOT00000020573.6	Kmt2a	ENSRNOG00000015133	lysine methyltransferase 2A Source RGD Symbol Acc 1586165
D10	SBR1163090	ENSRNOT00000013468.6	Ndn	ENSRNOG00000010146	necdin, MAGE family member Source RGD Symbol Acc 1310526
D11	SBR1164665	ENSRNOT00000003984.5	LOC100909913	ENSRNOG00000002960	NDP, norrin cystine knot growth factor Source RGD Symbol Acc 1563968
D12	SBR1108704	ENSRNOT00000007662.7	Neurod1	ENSRNOG00000005609	neuronal differentiation 1 Source RGD Symbol Acc 3165
E01	SBR1180129	ENSRNOT00000015916.3	Neurog1	ENSRNOG00000022405	neurogenin 1 Source RGD Symbol Acc 3167
E02	SBR1211900	ENSRNOT00000014570.4	Neurog2	ENSRNOG00000010972	neurogenin 2 Source RGD Symbol Acc 1309061
E03	SBR1120157	ENSRNOT00000089538.1	Nf1	ENSRNOG00000013780	neurofibromin 1 Source RGD Symbol Acc 3168
E04	SBR1215922	ENSRNOT00000032388.4	Nog	ENSRNOG00000023683	noggin Source RGD Symbol Acc 3183
E05	SBR1183596	ENSRNOT00000026212.7	Notch1	ENSRNOG00000019322	notch 1 Source RGD Symbol Acc 3187
E06	SBR1107240	ENSRNOT00000025718.4	Notch2	ENSRNOG00000018835	notch 2 Source RGD Symbol Acc 3188
E07	SBR1138548	ENSRNOT00000050222.7	Nrcam	ENSRNOG00000004067	neuronal cell adhesion molecule Source RGD Symbol Acc 3209
E08	SBR1158142	ENSRNOT00000014147.6	Nrg1	ENSRNOG00000010392	neuregulin 1 Source RGD Symbol Acc 621341
E09	SBR1157725	ENSRNOT00000014492.5	Nrp1	ENSRNOG00000010744	neuropilin 1 Source RGD Symbol Acc 621588
E10	SBR1122077	ENSRNOT00000042562.3	Nrp2	ENSRNOG00000031232	neuropilin 2 Source RGD Symbol Acc 621442
E11	SBR1142304	ENSRNOT00000082009.1	Ntf3	ENSRNOG00000019716	neurotrophin 3 Source RGD Symbol Acc 619728
E12	SBR1152954	ENSRNOT00000005255.3	Ntn1	ENSRNOG00000003947	netrin 1 Source RGD Symbol Acc 619809
F01	SBR1206164	ENSRNOT00000000325.6	Olig2	ENSRNOG00000028658	oligodendrocyte transcription factor 2 Source RGD Symbol Acc 1307098
F02	SBR1107018	ENSRNOT00000003696.6	Pafah1b1	ENSRNOG00000002755	platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 Source RGD Symbol Acc 620331
F03	SBR1151717	ENSRNOT00000078559.1	Pard3	ENSRNOG00000032437	par-3 family cell polarity regulator Source RGD Symbol Acc 620374
F04	SBR1111778	ENSRNOT00000050076.4	Pax2	ENSRNOG00000014253	paired box 2 Source RGD Symbol Acc 1305568
F05	SBR1151181	ENSRNOT00000018652.5	Pax3	ENSRNOG00000013670	paired box 3 Source RGD Symbol Acc 620431
F06	SBR1184898	ENSRNOT00000006302.7	Pax6	ENSRNOG00000004410	paired box 6 Source RGD Symbol Acc 3258
F07	SBR1199615	ENSRNOT00000050922.5	Pou3f3	ENSRNOG00000038909	POU class 3 homeobox 3 Source RGD Symbol Acc 619768
F08	SBR1197003	ENSRNOT00000092174.1	Pou4f1	ENSRNOG00000060662	POU class 4 homeobox 1 Source RGD Symbol Acc 620074
F09	SBR1167990	ENSRNOT00000016088.6	Ptn	ENSRNOG00000011946	pleiotrophin Source RGD Symbol Acc 3444
F10	SBR1123146	ENSRNOT00000001417.5	Rac1	ENSRNOG00000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1119156	ENSRNOT00000087080.1	Robo1	ENSRNOG00000029614	roundabout guidance receptor 1 Source RGD Symbol Acc 61941
F12	SBR1197081	ENSRNOT00000042965.3	Rtn4	ENSRNOG00000004621	reticulon 4 Source RGD Symbol Acc 620989
G01	SBR1171045	ENSRNOT00000015612.5	S100a6	ENSRNOG00000011647	S100 calcium binding protein A6 Source RGD Symbol Acc 620264
G02	SBR1099560	ENSRNOT00000001743.2	S100b	ENSRNOG00000001295	S100 calcium binding protein B Source RGD Symbol Acc 3615
G03	SBR1130647	ENSRNOT00000008497.2	Shh	ENSRNOG00000006120	sonic hedgehog signaling molecule Source RGD Symbol Acc 3673
G04	SBR1128334	ENSRNOT00000081601.1	Slit2	ENSRNOG00000003840	slit guidance ligand 2 Source RGD Symbol Acc 69310
G05	SBR1136942	ENSRNOT00000002885.6	Sod1	ENSRNOG00000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
G06	SBR1125680	ENSRNOT00000016236.3	Sox2	ENSRNOG00000012199	SRY box 2 Source RGD Symbol Acc 1565646
G07	SBR1177878	ENSRNOT00000025494.4	Sox8	ENSRNOG00000018841	SRY box 8 Source RGD Symbol Acc 1309072
G08	SBR1138417	ENSRNOT00000026760.4	Stat3	ENSRNOG00000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
G09	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G10	SBR1110132	ENSRNOT00000027682.5	Th	ENSRNOG00000020410	tyrosine hydroxylase Source RGD Symbol Acc 3853
G11	SBR1113662	ENSRNOT00000080254.1	Tnr	ENSRNOG00000002468	tenascin R Source RGD Symbol Acc 3886
G12	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG00000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	SBR1218555	Sybr_RGDC	RGDC	Sybr_RGDC	Rat 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.

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