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

Rat Pain: Neuropathic & Inflammatory

Cat. no. 249950 SBRN-162ZR

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	Ace	Adora1	Adrb2	Alox5	Bdkrb1	Bdnf	Cacna1b	Calca	Cck	Cckbr	Ccl12	Ccl2
B	Cd200	Cd4	Chrna4	Cnr1	Cnr2	Comt	Csf1	Cx3cr1	Dbh	Edn1	Ednra	Faah
C	Gch1	Gdnf	Grin1	Grin2b	Grm1	Grm5	Htr1a	Htr2a	Il10	Il18	Il1a	Il1b
D	Il2	Il6	Itgad	Itgb2	Kcnip3	Kcnj6	Kcnq2	Kcnq3	Maob	Mapk1	Mapk14	Mapk3
E	Mapk8	Ngf	Ntrk1	Oprd1	Oprk1	Oprm1	P2rx3	P2rx4	P2rx7	P2ry1	Pdyn	Penk
F	Pla2g1b	Pnoc	Prok2	Ptger1	Ptger3	Ptger4	Ptges	Ptges2	Ptges3	Ptgs1	Ptgs2	Scn10a
G	Scn11a	Scn3a	Scn9a	Slc6a2	Tac1	Tacr1	Tlr2	Tlr4	LOC103694380	Trpa1	Trpv1	Trpv3
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	SBR1133139	ENSRNOT00000010627.8	Ace	ENSRNOG00000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A02	SBR1147673	ENSRNOT00000078993.1	Adora1	ENSRNOG00000003442	adenosine A1 receptor Source RGD Symbol Acc 2048
A03	SBR1208091	ENSRNOT00000026098.3	Adrb2	ENSRNOG00000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A04	SBR1113879	ENSRNOT00000017633.5	Alox5	ENSRNOG00000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
A05	SBR1146463	ENSRNOT00000005953.3	Bdkrb1	ENSRNOG00000004488	bradykinin receptor B1 Source RGD Symbol Acc 620401
A06	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG00000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A07	SBR1185596	ENSRNOT00000006162.6	Cacna1b	ENSRNOG00000004560	calcium voltage-gated channel subunit alpha1 B Source RGD Symbol Acc 628852
A08	SBR1193989	ENSRNOT00000055124.4	Calca	ENSRNOG00000011130	calcitonin-related polypeptide alpha Source RGD Symbol Acc 2254
A09	SBR1126863	ENSRNOT00000026159.3	Cck	ENSRNOG00000019321	cholecystokinin Source RGD Symbol Acc 2288
A10	SBR1134148	ENSRNOT00000085395.1	Cckbr	ENSRNOG00000017679	cholecystokinin B receptor Source RGD Symbol Acc 2290
A11	SBR1129555	ENSRNOT00000031626.5	Ccl12	ENSRNOG00000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
A12	SBR1165601	ENSRNOT00000009448.3	Ccl2	ENSRNOG00000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B01	SBR1186545	ENSRNOT00000093295.1	Cd200	ENSRNOG00000002141	Cd200 molecule Source RGD Symbol Acc 3104
B02	SBR1197766	ENSRNOT00000021915.2	Cd4	ENSRNOG00000016294	Cd4 molecule Source RGD Symbol Acc 2306
B03	SBR1155000	ENSRNOT00000009041.7	Chrna4	ENSRNOG00000011202	cholinergic receptor nicotinic alpha 4 subunit Source RGD Symbol Acc 2346
B04	SBR1112580	ENSRNOT00000010850.2	Cnr1	ENSRNOG00000008223	cannabinoid receptor 1 Source RGD Symbol Acc 2369
B05	SBR1135717	ENSRNOT00000074998.2	Cnr2	ENSRNOG00000009260	cannabinoid receptor 2 Source RGD Symbol Acc 619713
B06	SBR1128940	ENSRNOT00000050269.5	Comt	ENSRNOG00000001889	catechol-O-methyltransferase Source RGD Symbol Acc 2379
B07	SBR1099651	ENSRNOT00000025222.6	Csf1	ENSRNOG00000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B08	SBR1106590	ENSRNOT00000025019.2	Cx3cr1	ENSRNOG00000018509	C-X3-C motif chemokine receptor 1 Source RGD Symbol Acc 620137
B09	SBR1207923	ENSRNOT00000061201.3	Dbh	ENSRNOG00000006641	dopamine beta-hydroxylase Source RGD Symbol Acc 2489
B10	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG00000014361	endothelin 1 Source RGD Symbol Acc 2532
B11	SBR1211856	ENSRNOT00000080095.1	Ednra	ENSRNOG00000012721	endothelin receptor type A Source RGD Symbol Acc 2535
B12	SBR1185593	ENSRNOT00000015961.6	Faah	ENSRNOG00000011019	fatty acid amide hydrolase Source RGD Symbol Acc 61808
C01	SBR1209903	ENSRNOT00000014821.7	Gch1	ENSRNOG00000011039	GTP cyclohydrolase 1 Source RGD Symbol Acc 61992
C02	SBR1188150	ENSRNOT00000041288.2	Gdnf	ENSRNOG00000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
C03	SBR1215394	ENSRNOT00000044246.4	Grin1	ENSRNOG00000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
C04	SBR1117521	ENSRNOT00000011697.4	Grin2b	ENSRNOG00000008766	glutamate ionotropic receptor NMDA type subunit 2B Source RGD Symbol Acc 2738
C05	SBR1115900	ENSRNOT00000044325.3	Grm1	ENSRNOG00000014290	glutamate metabotropic receptor 1 Source RGD Symbol Acc 2742
C06	SBR1162445	ENSRNOT00000050639.2	Grm5	ENSRNOG00000016429	glutamate metabotropic receptor 5 Source RGD Symbol Acc 2746
C07	SBR1152900	ENSRNOT00000013618.2	Htr1a	ENSRNOG00000010254	5-hydroxytryptamine receptor 1A Source RGD Symbol Acc 2845
C08	SBR1130221	ENSRNOT00000013408.6	Htr2a	ENSRNOG00000010063	5-hydroxytryptamine receptor 2A Source RGD Symbol Acc 61800
C09	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG00000004647	interleukin 10 Source RGD Symbol Acc 2886
C10	SBR1183288	ENSRNOT00000013093.6	Il18	ENSRNOG00000009848	interleukin 18 Source RGD Symbol Acc 2889
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1106125	006113.8	Il1a	000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
C12	SBR1196387	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D01	SBR1102170	ENSRNOT00000 023327.2	Il2	ENSRNOG00 000017348	interleukin 2 Source RGD Symbol Acc 620047
D02	SBR1156877	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D03	SBR1114389	ENSRNOT00000 086003.1	Itgad	ENSRNOG00 000019728	integrin subunit alpha M Source RGD Symbol Acc 2926
D04	SBR1182978	ENSRNOT00000 001639.6	Itgb2	ENSRNOG00 000001224	integrin subunit beta 2 Source RGD Symbol Acc 1305581
D05	SBR1186998	ENSRNOT00000 078994.1	Kcnip3	ENSRNOG00 000014152	potassium voltage-gated channel interacting protein 3 Source RGD Symbol Acc 70888
D06	SBR1203649	ENSRNOT00000 066940.2	Kcnj6	ENSRNOG00 000001658	potassium voltage-gated channel subfamily J member 6 Source RGD Symbol Acc 2959
D07	SBR1167493	ENSRNOT00000 049961.4	Kcnq2	ENSRNOG00 000011624	potassium voltage-gated channel subfamily Q member 2 Source RGD Symbol Acc 621504
D08	SBR1152238	ENSRNOT00000 074573.2	Kcnq3	ENSRNOG00 000005206	potassium voltage-gated channel subfamily Q member 3 Source RGD Symbol Acc 69222
D09	SBR1159358	ENSRNOT00000 044009.5	Maob	ENSRNOG00 000029778	monoamine oxidase B Source RGD Symbol Acc 3041
D10	SBR1202944	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D11	SBR1149566	ENSRNOT00000 000618.6	Mapk14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D12	SBR1209281	ENSRNOT00000 087625.1	Mapk3	ENSRNOG00 000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
E01	SBR1144517	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E02	SBR1142365	ENSRNOT00000 078376.1	Ngf	ENSRNOG00 000016571	nerve growth factor Source RGD Symbol Acc 1598328
E03	SBR1094048	ENSRNOT00000 018961.3	Ntrk1	ENSRNOG00 000013953	neurotrophic receptor tyrosine kinase 1 Source RGD Symbol Acc 620144
E04	SBR1146582	ENSRNOT00000 014084.3	Oprd1	ENSRNOG00 000010531	opioid receptor, delta 1 Source RGD Symbol Acc 3233
E05	SBR1105261	ENSRNOT00000 010254.3	Oprk1	ENSRNOG00 000007647	opioid receptor, kappa 1 Source RGD Symbol Acc 69426
E06	SBR1163551	ENSRNOT00000 079628.1	Oprm1	ENSRNOG00 000018191	opioid receptor, mu 1 Source RGD Symbol Acc 3234
E07	SBR1106073	ENSRNOT00000 088815.1	P2rx3	ENSRNOG00 000008552	purinergic receptor P2X 3 Source RGD Symbol Acc 620253
E08	SBR1130101	ENSRNOT00000 001752.5	P2rx4	ENSRNOG00 000001300	purinergic receptor P2X 4 Source RGD Symbol Acc 62073
E09	SBR1108753	ENSRNOT00000 001746.7	P2rx7	ENSRNOG00 000001296	purinergic receptor P2X 7 Source RGD Symbol Acc 3241
E10	SBR1142577	ENSRNOT00000 019305.4	P2ry1	ENSRNOG00 000014232	purinergic receptor P2Y1 Source RGD Symbol Acc 3242
E11	SBR1179011	ENSRNOT00000 037576.3	Pdyn	ENSRNOG00 000026036	prodynorphin Source RGD Symbol Acc 62054
E12	SBR1216035	ENSRNOT00000 089318.1	Penk	ENSRNOG00 000008943	proenkephalin Source RGD Symbol Acc 68946
F01	SBR1140630	ENSRNOT00000 001525.3	Pla2g1b	ENSRNOG00 000001153	phospholipase A2 group IB Source RGD Symbol Acc 61949
F02	SBR1144851	ENSRNOT00000 019117.7	Pnoc	ENSRNOG00 000014231	prepronociceptin Source RGD Symbol Acc 3362
F03	SBR1135665	ENSRNOT00000 015075.2	Prok2	ENSRNOG00 000010898	prokineticin 2 Source RGD Symbol Acc 620280
F04	SBR1147450	ENSRNOT00000 005470.4	Ptger1	ENSRNOG00 000004094	prostaglandin E receptor 1 Source RGD Symbol Acc 3434
F05	SBR1205419	ENSRNOT00000 014126.5	Ptger3	ENSRNOG00 000010325	prostaglandin E receptor 3 Source RGD Symbol Acc 3435
F06	SBR1096024	ENSRNOT00000 017886.5	Ptger4	ENSRNOG00 000013240	prostaglandin E receptor 4 Source RGD Symbol Acc 628641
F07	SBR1156570	ENSRNOT00000 045993.2	Ptges	ENSRNOG00 000006320	prostaglandin E synthase Source RGD Symbol Acc 62076
F08	SBR1174854	ENSRNOT00000 019184.6	Ptges2	ENSRNOG00 000014050	prostaglandin E synthase 2 Source RGD Symbol Acc 1310836
F09	SBR1164636	ENSRNOT00000 003787.7	Ptges3	ENSRNOG00 000002642	prostaglandin E synthase 3 Source RGD Symbol Acc 1561913
F10	SBR1187694	ENSRNOT00000 010218.5	Ptgs1	ENSRNOG00 000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1122148	ENSRNOT00000003567.4	Ptgs2	ENSRNOG00000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F12	SBR1098090	ENSRNOT00000046864.4	Scn10a	ENSRNOG00000032473	sodium voltage-gated channel alpha subunit 10 Source RGD Symbol Acc 3629
G01	SBR1124353	ENSRNOT00000034025.3	Scn11a	ENSRNOG00000032884	sodium voltage-gated channel alpha subunit 11 Source RGD Symbol Acc 3630
G02	SBR1179455	ENSRNOT00000081401.1	Scn3a	ENSRNOG00000005007	sodium voltage-gated channel alpha subunit 3 Source RGD Symbol Acc 3635
G03	SBR1136164	ENSRNOT00000065126.3	Scn9a	ENSRNOG00000006639	sodium voltage-gated channel alpha subunit 9 Source RGD Symbol Acc 69368
G04	SBR1191815	ENSRNOT00000022285.7	Slc6a2	ENSRNOG00000016311	solute carrier family 6 member 2 Source RGD Symbol Acc 621822
G05	SBR1145127	ENSRNOT00000009888.4	Tac1	ENSRNOG00000007374	tachykinin, precursor 1 Source RGD Symbol Acc 3807
G06	SBR1116879	ENSRNOT00000007984.5	Tacr1	ENSRNOG00000005853	tachykinin receptor 1 Source RGD Symbol Acc 3811
G07	SBR1126190	ENSRNOT00000013025.4	Tlr2	ENSRNOG00000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
G08	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG00000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G09	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G10	SBR1174352	ENSRNOT00000009874.2	Trpa1	ENSRNOG00000007354	transient receptor potential cation channel, subfamily A, member 1 Source RGD Symbol Acc 1303284
G11	SBR1154501	ENSRNOT00000026456.6	Trpv1	ENSRNOG00000019486	transient receptor potential cation channel, subfamily V, member 1 Source RGD Symbol Acc 628841
G12	SBR1153657	ENSRNOT00000026596.3	Trpv3	ENSRNOG00000019606	transient receptor potential cation channel, subfamily V, member 3 Source RGD Symbol Acc 1564531
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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