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

Rat GABA & Glutamate

Cat. no. 249950 SBRN-152ZR

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	Abat	Adcy7	Adora1	Adora2a	Aldh5a1	App	Avp	Bdnf	Cacna1a	Cacna1b	Cdk5r1	Cln3
B	Dlg4	Gabbr1	Gabbr2	Gabra1	Gabra2	Gabra4	Gabra5	Gabra6	Gabrb1	Gabrb3	Gabrd	Gabre
C	Gabrg1	Gabrg2	Gabrg3	Gabrq	Gabrr1	Gabrr2	Gad1	Gls	Glul	Gnai1	Gnaq	Gphn
D	Gria1	Gria2	Gria3	Gria4	Grik1	Grik2	Grik4	Grik5	Grin1	Grin2a	Grin2b	Grin2c
E	Grm1	Grm2	Grm3	Grm4	Grm5	Grm6	Grm7	Grm8	Homer1	Homer2	Il1b	Itpr1
F	Mapk1	Nsf	P2rx7	Phgdh	Pla2g6	Plcb1	Prodh1	Shank2	Slc17a6	Slc17a7	Slc17a8	Slc1a1
G	Slc1a2	Slc1a3	Slc1a6	Slc1a7	Slc32a1	Slc38a1	Slc6a1	Slc6a11	Slc6a12	Slc6a13	Snca	Srr
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	SBR1176720	ENSRNOT00000003633.4	Abat	ENSRNOG00000002636	4-aminobutyrate aminotransferase Source RGD Symbol Acc 620948
A02	SBR1124296	ENSRNOT00000020700.5	Adcy7	ENSRNOG00000014776	adenylate cyclase 7 Source RGD Symbol Acc 619966
A03	SBR1147673	ENSRNOT00000078993.1	Adora1	ENSRNOG00000003442	adenosine A1 receptor Source RGD Symbol Acc 2048
A04	SBR1138696	ENSRNOT00000001759.3	Adora2a	ENSRNOG00000001302	adenosine A2a receptor Source RGD Symbol Acc 2049
A05	SBR1126366	ENSRNOT00000031384.5	Aldh5a1	ENSRNOG00000023538	aldehyde dehydrogenase 5 family, member A1 Source RGD Symbol Acc 621422
A06	SBR1129904	ENSRNOT00000048854.6	App	ENSRNOG00000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
A07	SBR1112106	ENSRNOT00000028833.5	Avp	ENSRNOG00000021229	arginine vasopressin Source RGD Symbol Acc 2184
A08	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG00000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A09	SBR1096958	ENSRNOT00000083448.1	Cacna1a	ENSRNOG00000052707	calcium voltage-gated channel subunit alpha1 A Source RGD Symbol Acc 2244
A10	SBR1185596	ENSRNOT00000006162.6	Cacna1b	ENSRNOG00000004560	calcium voltage-gated channel subunit alpha1 B Source RGD Symbol Acc 628852
A11	SBR1197371	ENSRNOT00000031746.2	Cdk5r1	ENSRNOG00000021685	cyclin-dependent kinase 5 regulatory subunit 1 Source RGD Symbol Acc 629472
A12	SBR1141062	ENSRNOT00000025898.4	Cln3	ENSRNOG00000019103	CLN3, battenin Source RGD Symbol Acc 1359537
B01	SBR1114299	ENSRNOT00000068493.2	Dlg4	ENSRNOG00000018526	discs large MAGUK scaffold protein 4 Source RGD Symbol Acc 68424
B02	SBR1111634	ENSRNOT00000051634.5	Gabbr1	ENSRNOG00000000774	gamma-aminobutyric acid type B receptor subunit 1 Source RGD Symbol Acc 621537
B03	SBR1193822	ENSRNOT00000011573.4	Gabbr2	ENSRNOG00000008431	gamma-aminobutyric acid type B receptor subunit 2 Source RGD Symbol Acc 619864
B04	SBR1169367	ENSRNOT00000004725.7	Gabra1	ENSRNOG00000003512	gamma-aminobutyric acid type A receptor alpha1 subunit Source RGD Symbol Acc 61855
B05	SBR1116109	ENSRNOT00000064779.4	Gabra2	ENSRNOG00000002349	gamma-aminobutyric acid type A receptor alpha2 subunit Source RGD Symbol Acc 61856
B06	SBR1206079	ENSRNOT00000003191.6	Gabra4	ENSRNOG00000002336	gamma-aminobutyric acid type A receptor alpha4 subunit Source RGD Symbol Acc 621670
B07	SBR1216599	ENSRNOT00000093306.1	Gabra5	ENSRNOG00000010803	gamma-aminobutyric acid type A receptor alpha 5 subunit Source RGD Symbol Acc 61859
B08	SBR1118293	ENSRNOT00000004877.4	Gabra6	ENSRNOG00000003569	gamma-aminobutyric acid type A receptor alpha 6 subunit Source RGD Symbol Acc 61861
B09	SBR1143118	ENSRNOT00000003170.3	Gabrb1	ENSRNOG00000002327	gamma-aminobutyric acid type A receptor beta 1 subunit Source RGD Symbol Acc 2649
B10	SBR1115353	ENSRNOT00000081831.1	Gabrb3	ENSRNOG00000060599	gamma-aminobutyric acid type A receptor beta 3 subunit Source RGD Symbol Acc 2651
B11	SBR1136161	ENSRNOT00000022246.4	Gabrd	ENSRNOG00000016385	gamma-aminobutyric acid type A receptor delta subunit Source RGD Symbol Acc 61901
B12	SBR1100491	ENSRNOT00000077750.1	Gabre	ENSRNOG00000061182	gamma-aminobutyric acid type A receptor epsilon subunit Source RGD Symbol Acc 68320
C01	SBR1172493	ENSRNOT00000003240.6	Gabrg1	ENSRNOG00000002360	gamma-aminobutyric acid type A receptor gamma 1 subunit Source RGD Symbol Acc 621732
C02	SBR1150926	ENSRNOT00000082445.1	Gabrg2	ENSRNOG00000003241	gamma-aminobutyric acid type A receptor gamma 2 subunit Source RGD Symbol Acc 61966
C03	SBR1214963	ENSRNOT00000093339.1	Gabrg3	ENSRNOG00000014862	gamma-aminobutyric acid type A receptor gamma 3 subunit Source RGD Symbol Acc 621735
C04	SBR1164707	ENSRNOT00000078419.1	Gabrq	ENSRNOG00000053402	gamma-aminobutyric acid type A receptor theta subunit Source RGD Symbol Acc 68331
C05	SBR1135162	ENSRNOT00000010172.6	Gabrr1	ENSRNOG00000007603	gamma-aminobutyric acid type A receptor rho 1 subunit Source RGD Symbol Acc 61900
C06	SBR1130923	ENSRNOT00000081825.1	Gabrr2	ENSRNOG00000007490	gamma-aminobutyric acid type A receptor rho 2 subunit Source RGD Symbol Acc 61902
C07	SBR1132392	ENSRNOT00000087712.1	Gad1	ENSRNOG00000000007	glutamate decarboxylase 1 Source RGD Symbol Acc 2652
C08	SBR1130329	ENSRNOT00000090026.1	Gls	ENSRNOG00000056246	glutaminase Source RGD Symbol Acc 2707
C09	SBR1200434	ENSRNOT00000075480.2	Glul	ENSRNOG00000049560	glutamate-ammonia ligase Source RGD Symbol Acc 2710
C10	SBR1166173	ENSRNOT00000091004.1	Gnai1	ENSRNOG00000057096	G protein subunit alpha i1 Source RGD Symbol Acc 2713
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1098296	019174.5	Gnaq	000014183	G protein subunit alpha q Source RGD Symbol Acc 620770
C12	SBR1118394	ENSRNOT00000 075054.3	Gphn	ENSRNOG00 000028366	gephyrin Source RGD Symbol Acc 69194
D01	SBR1181304	ENSRNOT00000 073148.2	Gria1	ENSRNOG00 000045816	glutamate ionotropic receptor AMPA type subunit 1 Source RGD Symbol Acc 621531
D02	SBR1126470	ENSRNOT00000 077941.1	Gria2	ENSRNOG00 000054204	glutamate ionotropic receptor AMPA type subunit 2 Source RGD Symbol Acc 61862
D03	SBR1198346	ENSRNOT00000 029031.7	Gria3	ENSRNOG00 000007682	glutamate ionotropic receptor AMPA type subunit 3 Source RGD Symbol Acc 70958
D04	SBR1136765	ENSRNOT00000 081171.1	Gria4	ENSRNOG00 000006957	glutamate ionotropic receptor AMPA type subunit 4 Source RGD Symbol Acc 61863
D05	SBR1110348	ENSRNOT00000 042581.5	Grik1	ENSRNOG00 000001575	glutamate ionotropic receptor kainate type subunit 1 Source RGD Symbol Acc 2732
D06	SBR1176910	ENSRNOT00000 076234.1	Grik2	ENSRNOG00 000000368	glutamate ionotropic receptor kainate type subunit 2 Source RGD Symbol Acc 2733
D07	SBR1123409	ENSRNOT00000 048347.3	Grik4	ENSRNOG00 000030910	glutamate ionotropic receptor kainate type subunit 4 Source RGD Symbol Acc 2734
D08	SBR1188412	ENSRNOT00000 027578.6	Grik5	ENSRNOG00 000020310	glutamate ionotropic receptor kainate type subunit 5 Source RGD Symbol Acc 2735
D09	SBR1215394	ENSRNOT00000 044246.4	Grin1	ENSRNOG00 000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
D10	SBR1188957	ENSRNOT00000 044626.3	Grin2a	ENSRNOG00 000033942	glutamate ionotropic receptor NMDA type subunit 2A Source RGD Symbol Acc 2737
D11	SBR1117521	ENSRNOT00000 011697.4	Grin2b	ENSRNOG00 000008766	glutamate ionotropic receptor NMDA type subunit 2B Source RGD Symbol Acc 2738
D12	SBR1207332	ENSRNOT00000 004477.5	Grin2c	ENSRNOG00 000003280	glutamate ionotropic receptor NMDA type subunit 2C Source RGD Symbol Acc 2739
E01	SBR1115900	ENSRNOT00000 044325.3	Grm1	ENSRNOG00 000014290	glutamate metabotropic receptor 1 Source RGD Symbol Acc 2742
E02	SBR1165238	ENSRNOT00000 017607.3	Grm2	ENSRNOG00 000013171	glutamate metabotropic receptor 2 Source RGD Symbol Acc 2743
E03	SBR1095973	ENSRNOT00000 007572.7	Grm3	ENSRNOG00 000005519	glutamate metabotropic receptor 3 Source RGD Symbol Acc 2744
E04	SBR1182094	ENSRNOT00000 066115.3	Grm4	ENSRNOG00 000000487	glutamate metabotropic receptor 4 Source RGD Symbol Acc 2745
E05	SBR1162445	ENSRNOT00000 050639.2	Grm5	ENSRNOG00 000016429	glutamate metabotropic receptor 5 Source RGD Symbol Acc 2746
E06	SBR1160052	ENSRNOT00000 000249.6	Grm6	ENSRNOG00 000000233	glutamate metabotropic receptor 6 Source RGD Symbol Acc 2747
E07	SBR1096823	ENSRNOT00000 056570.3	Grm7	ENSRNOG00 000005662	glutamate metabotropic receptor 7 Source RGD Symbol Acc 619857
E08	SBR1099878	ENSRNOT00000 031714.4	Grm8	ENSRNOG00 000021468	glutamate metabotropic receptor 8 Source RGD Symbol Acc 619858
E09	SBR1121409	ENSRNOT00000 071804.3	Homer1	ENSRNOG00 000047014	homer scaffold protein 1 Source RGD Symbol Acc 628725
E10	SBR1097966	ENSRNOT00000 087785.1	Homer2	ENSRNOG00 000061450	homer scaffold protein 2 Source RGD Symbol Acc 620705
E11	SBR1196387	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E12	SBR1160599	ENSRNOT00000 064025.3	Itpr1	ENSRNOG00 000007104	inositol 1,4,5-trisphosphate receptor, type 1 Source RGD Symbol Acc 2933
F01	SBR1202944	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
F02	SBR1209794	ENSRNOT00000 006361.6	Nsf	ENSRNOG00 000003905	N-ethylmaleimide sensitive factor, vesicle fusing ATPase Source RGD Symbol Acc 621594
F03	SBR1108753	ENSRNOT00000 001746.7	P2rx7	ENSRNOG00 000001296	purinergic receptor P2X 7 Source RGD Symbol Acc 3241
F04	SBR1141793	ENSRNOT00000 056173.2	Phgdh	ENSRNOG00 000019328	phosphoglycerate dehydrogenase Source RGD Symbol Acc 61987
F05	SBR1139024	ENSRNOT00000 090565.1	Pla2g6	ENSRNOG00 000012295	phospholipase A2 group VI Source RGD Symbol Acc 628867
F06	SBR1216499	ENSRNOT00000 006389.6	Plcb1	ENSRNOG00 000004810	phospholipase C beta 1 Source RGD Symbol Acc 3344
F07	SBR1164686	ENSRNOT00000 002576.7	Prodh1	ENSRNOG00 000000281	proline dehydrogenase 1 Source RGD Symbol Acc 1590932
F08	SBR1163356	ENSRNOT00000 092579.1	Shank2	ENSRNOG00 000050206	SH3 and multiple ankyrin repeat domains 2 Source RGD Symbol Acc 628772
F09	SBR1167683	ENSRNOT00000 022383.6	Slc17a6	ENSRNOG00 000016147	solute carrier family 17 member 6 Source RGD Symbol Acc 620531
F10	SBR1197362	ENSRNOT00000 092245.1	Slc17a7	ENSRNOG00 000020650	solute carrier family 17 member 7 Source RGD Symbol Acc 620101

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1175456	ENSRNOT00000092527.1	Slc17a8	ENSRNOG00000007581	solute carrier family 17 member 8 Source RGD Symbol Acc 628870
F12	SBR1169541	ENSRNOT00000020272.7	Slc1a1	ENSRNOG00000014816	solute carrier family 1 member 1 Source RGD Symbol Acc 3696
G01	SBR1201605	ENSRNOT00000007604.6	Slc1a2	ENSRNOG00000005479	solute carrier family 1 member 2 Source RGD Symbol Acc 3697
G02	SBR1155692	ENSRNOT00000022319.6	Slc1a3	ENSRNOG00000016163	solute carrier family 1 member 3 Source RGD Symbol Acc 3698
G03	SBR1199422	ENSRNOT00000009931.5	Slc1a6	ENSRNOG00000007509	solute carrier family 1 member 6 Source RGD Symbol Acc 620340
G04	SBR1136816	ENSRNOT00000077808.1	Slc1a7	ENSRNOG00000011644	solute carrier family 1 member 7 Source RGD Symbol Acc 1311928
G05	SBR1118588	ENSRNOT00000020720.6	Slc32a1	ENSRNOG00000015393	solute carrier family 32 member 1 Source RGD Symbol Acc 621402
G06	SBR1105928	ENSRNOT00000008138.4	Slc38a1	ENSRNOG00000005291	solute carrier family 38, member 1 Source RGD Symbol Acc 69645
G07	SBR1212009	ENSRNOT00000009705.6	Slc6a1	ENSRNOG00000006527	solute carrier family 6 member 1 Source RGD Symbol Acc 620533
G08	SBR1188194	ENSRNOT00000008342.5	Slc6a11	ENSRNOG00000005697	solute carrier family 6 member 11 Source RGD Symbol Acc 628737
G09	SBR1181000	ENSRNOT00000018821.4	Slc6a12	ENSRNOG00000013547	solute carrier family 6 member 12 Source RGD Symbol Acc 620255
G10	SBR1125522	ENSRNOT00000079744.1	Slc6a13	ENSRNOG00000012876	solute carrier family 6 member 13 Source RGD Symbol Acc 620788
G11	SBR1121544	ENSRNOT00000039247.4	Snca	ENSRNOG00000008656	synuclein alpha Source RGD Symbol Acc 3729
G12	SBR1128017	ENSRNOT00000092338.1	Srr	ENSRNOG00000002991	serine racemase Source RGD Symbol Acc 735094
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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