

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

Rat Dopamine & Serotonin Pathway

Cat. no. 249950 SBRN-158ZR

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	Adcy1	Adcy2	Adcy3	Adcy5	Adrb1	Adrb2	Grk2	Grk3	Akt1	Akt2	Akt3	Alox12
B	App	Arrb1	Arrb2	Bdnf	Cacna1a	Casp3	Calc5	Comt	Creb1	Cyp2d4	Dbh	Ddc
C	Drd1	Drd2	Drd3	Drd4	Drd5	Dusp1	Ephb1	Fos	Gdnf	Gfap	Grk4	Grk5
D	Grk6	Gsk3a	Gsk3b	Htr1a	Htr1b	Htr1d	Htr1f	Htr2a	Htr2b	Htr2c	Htr3a	Htr3b
E	Htr4	Htr5a	Htr6	Htr7	Itpr1	Maob	Maob	Mapk1	Nr4a1	Nr4a3	Pde10a	Pde4a
F	Pde4b	Pde4c	Pde4d	Pdyn	Pik3ca	Pik3cg	Pia2g5	Plcb1	Plcb2	Plcb3	Ppp1r1b	Prkaca
G	Plgs2	Slc18a1	Slc18a2	Slc6a3	Slc6a4	Sncg	Sncgip	Syn2	Tdo2	Th	Tph1	Tph2
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	SBR1211599	ENSRNOT00000088032.1	Adcy1	ENSRNOG0000059479	adenylate cyclase 1 Source RGD Symbol Acc 1309318
A02	SBR1155204	ENSRNOT00000047627.3	Adcy2	ENSRNOG0000032150	adenylate cyclase 2 Source RGD Symbol Acc 619965
A03	SBR1123709	ENSRNOT00000005389.6	Adcy3	ENSRNOG0000003999	adenylate cyclase 3 Source RGD Symbol Acc 71009
A04	SBR1203771	ENSRNOT00000049180.2	Adcy5	ENSRNOG0000002229	adenylate cyclase 5 Source RGD Symbol Acc 71014
A05	SBR1141749	ENSRNOT00000022813.2	Adrb1	ENSRNOG0000017002	adrenoceptor beta 1 Source RGD Symbol Acc 2059
A06	SBR1208091	ENSRNOT00000026098.3	Adrb2	ENSRNOG0000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A07	SBR1164407	ENSRNOT00000025847.7	Grk2	ENSRNOG0000018985	G protein-coupled receptor kinase 2 Source RGD Symbol Acc 2062
A08	SBR1158759	ENSRNOT00000086397.1	Grk3	ENSRNOG0000059456	G protein-coupled receptor kinase 3 Source RGD Symbol Acc 2063
A09	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A10	SBR1190995	ENSRNOT00000025303.3	Akt2	ENSRNOG0000018677	AKT serine/threonine kinase 2 Source RGD Symbol Acc 2082
A11	SBR1132835	ENSRNOT00000085648.1	Akt3	ENSRNOG0000021497	AKT serine/threonine kinase 3 Source RGD Symbol Acc 62390
A12	SBR1134234	ENSRNOT00000091131.1	Alox12	ENSRNOG0000027037	arachidonate 12-lipoxygenase, 12S type Source RGD Symbol Acc 1311159
B01	SBR1129904	ENSRNOT00000048854.6	App	ENSRNOG0000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
B02	SBR1174142	ENSRNOT00000043554.4	Arrb1	ENSRNOG0000030404	arrestin, beta 1 Source RGD Symbol Acc 2156
B03	SBR1107056	ENSRNOT00000026207.7	Arrb2	ENSRNOG0000019308	arrestin, beta 2 Source RGD Symbol Acc 2157
B04	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
B05	SBR1096958	ENSRNOT00000083448.1	Cacna1a	ENSRNOG0000052707	calcium voltage-gated channel subunit alpha1 A Source RGD Symbol Acc 2244
B06	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B07	SBR1180282	ENSRNOT000000111052.4	Cdk5	ENSRNOG0000008017	cyclin-dependent kinase 5 Source RGD Symbol Acc 70514
B08	SBR1128940	ENSRNOT00000050269.5	Comt	ENSRNOG0000001889	catechol-O-methyltransferase Source RGD Symbol Acc 2379
B09	SBR1179341	ENSRNOT00000049654.4	Creb1	ENSRNOG0000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B10	SBR1150695	ENSRNOT000000111880.6	Cyp2d4	ENSRNOG0000032261	cytochrome P450, family 2, subfamily d, polypeptide 4 Source RGD Symbol Acc 620640
B11	SBR1207923	ENSRNOT00000061201.3	Dbh	ENSRNOG0000006641	dopamine beta-hydroxylase Source RGD Symbol Acc 2489
B12	SBR1153672	ENSRNOT00000005851.6	Ddc	ENSRNOG0000004327	dopa decarboxylase Source RGD Symbol Acc 2494
C01	SBR1169120	ENSRNOT00000030893.3	Drd1	ENSRNOG0000023688	dopamine receptor D1 Source RGD Symbol Acc 2518
C02	SBR1132727	ENSRNOT00000083419.1	Drd2	ENSRNOG0000008428	dopamine receptor D2 Source RGD Symbol Acc 2520
C03	SBR1163929	ENSRNOT00000089057.1	Drd3	ENSRNOG0000060806	dopamine receptor D3 Source RGD Symbol Acc 2521
C04	SBR1172863	ENSRNOT00000024137.4	Drd4	ENSRNOG0000017927	dopamine receptor D4 Source RGD Symbol Acc 2522
C05	SBR1106163	ENSRNOT00000007074.2	Drd5	ENSRNOG0000005338	dopamine receptor D5 Source RGD Symbol Acc 2523
C06	SBR1102337	ENSRNOT00000005383.5	Dusp1	ENSRNOG0000003977	dual specificity phosphatase 1 Source RGD Symbol Acc 620897
C07	SBR1202606	ENSRNOT00000010634.5	Ephb1	ENSRNOG0000007865	Eph receptor B1 Source RGD Symbol Acc 2556
C08	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C09	SBR1188150	ENSRNOT00000041288.2	Gdnf	ENSRNOG0000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
C10	SBR1140011	ENSRNOT00000034401.5	Gfap	ENSRNOG0000002919	glial fibrillary acidic protein Source RGD Symbol Acc 2679
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1111874	015894.4	Grk4	000011847	G protein-coupled receptor kinase 4 Source RGD Symbol Acc 61858
C12	SBR1193280	ENSRNOT00000015687.6	Grk5	ENSRNOG0000011439	G protein-coupled receptor kinase 5 Source RGD Symbol Acc 61985
D01	SBR1138174	ENSRNOT00000079063.1	Grk6	ENSRNOG0000014615	G protein-coupled receptor kinase 6 Source RGD Symbol Acc 61986
D02	SBR1194620	ENSRNOT00000027677.5	Gsk3a	ENSRNOG0000020417	glycogen synthase kinase 3 alpha Source RGD Symbol Acc 620351
D03	SBR1155736	ENSRNOT00000077612.1	Gsk3b	ENSRNOG0000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
D04	SBR1152900	ENSRNOT00000013618.2	Htr1a	ENSRNOG0000010254	5-hydroxytryptamine receptor 1A Source RGD Symbol Acc 2845
D05	SBR1104150	ENSRNOT00000017411.3	Htr1b	ENSRNOG0000013042	5-hydroxytryptamine receptor 1B Source RGD Symbol Acc 2846
D06	SBR1130762	ENSRNOT00000016046.2	Htr1d	ENSRNOG0000012038	5-hydroxytryptamine receptor 1D Source RGD Symbol Acc 2847
D07	SBR1141533	ENSRNOT00000000907.5	Htr1f	ENSRNOG0000000716	5-hydroxytryptamine receptor 1F Source RGD Symbol Acc 71083
D08	SBR1130221	ENSRNOT00000013408.6	Htr2a	ENSRNOG0000010063	5-hydroxytryptamine receptor 2A Source RGD Symbol Acc 61800
D09	SBR1151892	ENSRNOT00000023829.4	Htr2b	ENSRNOG0000017625	5-hydroxytryptamine receptor 2B Source RGD Symbol Acc 61801
D10	SBR1201144	ENSRNOT000000090922.1	Htr2c	ENSRNOG0000030877	5-hydroxytryptamine receptor 2C Source RGD Symbol Acc 2848
D11	SBR1142571	ENSRNOT00000008965.4	Htr3a	ENSRNOG0000006595	5-hydroxytryptamine receptor 3A Source RGD Symbol Acc 61818
D12	SBR1116020	ENSRNOT00000009574.2	Htr3b	ENSRNOG0000006920	5-hydroxytryptamine receptor 3B Source RGD Symbol Acc 61820
E01	SBR1149100	ENSRNOT00000025892.5	Htr4	ENSRNOG0000019134	5-hydroxytryptamine receptor 4 Source RGD Symbol Acc 2850
E02	SBR1177028	ENSRNOT00000009317.2	Htr5a	ENSRNOG0000007066	5-hydroxytryptamine receptor 5A Source RGD Symbol Acc 2851
E03	SBR1111005	ENSRNOT00000070865.2	Htr6	ENSRNOG0000049761	5-hydroxytryptamine receptor 6 Source RGD Symbol Acc 62044
E04	SBR1136033	ENSRNOT00000025493.7	Htr7	ENSRNOG0000018827	5-hydroxytryptamine receptor 7 Source RGD Symbol Acc 71034
E05	SBR1160599	ENSRNOT00000064025.3	Itpr1	ENSRNOG0000007104	inositol 1,4,5-trisphosphate receptor, type 1 Source RGD Symbol Acc 2933
E06	SBR1169430	ENSRNOT00000066674.2	Maoa	ENSRNOG0000002848	monoamine oxidase A Source RGD Symbol Acc 61898
E07	SBR1159358	ENSRNOT00000044009.5	Maob	ENSRNOG0000029778	monoamine oxidase B Source RGD Symbol Acc 3041
E08	SBR1202944	ENSRNOT00000002533.7	Mapk1	ENSRNOG0000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
E09	SBR1104967	ENSRNOT00000010171.4	Nr4a1	ENSRNOG0000007607	nuclear receptor subfamily 4, group A, member 1 Source RGD Symbol Acc 620029
E10	SBR1106415	ENSRNOT00000008302.4	Nr4a3	ENSRNOG0000005964	nuclear receptor subfamily 4, group A, member 3 Source RGD Symbol Acc 61882
E11	SBR1158739	ENSRNOT00000043474.3	Pde10a	ENSRNOG0000011310	phosphodiesterase 10A Source RGD Symbol Acc 68434
E12	SBR1168216	ENSRNOT00000061100.5	Pde4a	ENSRNOG0000020828	phosphodiesterase 4A Source RGD Symbol Acc 3279
F01	SBR1193339	ENSRNOT00000008278.6	Pde4b	ENSRNOG0000005905	phosphodiesterase 4B Source RGD Symbol Acc 3280
F02	SBR1128089	ENSRNOT00000026457.6	Pde4c	ENSRNOG0000019518	phosphodiesterase 4C Source RGD Symbol Acc 727918
F03	SBR1199441	ENSRNOT00000066384.4	Pde4d	ENSRNOG0000042536	phosphodiesterase 4D Source RGD Symbol Acc 3281
F04	SBR1179011	ENSRNOT00000037576.3	Pdyn	ENSRNOG0000026036	prodynorphin Source RGD Symbol Acc 62054
F05	SBR1193587	ENSRNOT00000083720.1	Pik3ca	ENSRNOG0000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
F06	SBR1140914	ENSRNOT00000012487.5	Pik3cg	ENSRNOG0000009385	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma Source RGD Symbol Acc 1306468
F07	SBR1173987	ENSRNOT00000022716.5	Pla2g5	ENSRNOG0000016838	phospholipase A2, group V Source RGD Symbol Acc 62051
F08	SBR1216499	ENSRNOT00000006389.6	Plcb1	ENSRNOG0000004810	phospholipase C beta 1 Source RGD Symbol Acc 3344
F09	SBR1127404	ENSRNOT00000078037.1	Plcb2	ENSRNOG0000058337	phospholipase C, beta 2 Source RGD Symbol Acc 621004
F10	SBR1202412	ENSRNOT00000028720.6	Plcb3	ENSRNOG0000021150	phospholipase C beta 3 Source RGD Symbol Acc 61993

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1133891	ENSRNOT00000037752.3	Ppp1r1b	ENSRNOG00000028404	protein phosphatase 1, regulatory (inhibitor) subunit 1B Source RGD Symbol Acc 621859
F12	SBR1139916	ENSRNOT00000041717.4	Prkaca	ENSRNOG00000005257	protein kinase cAMP-activated catalytic subunit alpha Source RGD Symbol Acc 3389
G01	SBR1122148	ENSRNOT00000003567.4	Ptgs2	ENSRNOG00000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
G02	SBR1120599	ENSRNOT00000016193.3	Slc18a1	ENSRNOG00000011992	solute carrier family 18 member A1 Source RGD Symbol Acc 3693
G03	SBR1174145	ENSRNOT00000011983.2	Slc18a2	ENSRNOG00000008890	solute carrier family 18 member A2 Source RGD Symbol Acc 3694
G04	SBR1109116	ENSRNOT00000040291.1	Slc6a3	ENSRNOG00000017302	solute carrier family 6 member 3 Source RGD Symbol Acc 3715
G05	SBR1155142	ENSRNOT00000004717.6	Slc6a4	ENSRNOG00000003476	solute carrier family 6 member 4 Source RGD Symbol Acc 3714
G06	SBR1121544	ENSRNOT00000039247.2	Snca	ENSRNOG00000008656	synuclein alpha Source RGD Symbol Acc 3729
G07	SBR1190076	ENSRNOT00000025119.5	Sncaip	ENSRNOG00000018254	synuclein, alpha interacting protein Source RGD Symbol Acc 1309283
G08	SBR1171234	ENSRNOT00000011292.2	Syn2	ENSRNOG00000008157	synapsin II Source RGD Symbol Acc 3798
G09	SBR1094213	ENSRNOT00000015732.3	Tdo2	ENSRNOG00000011612	tryptophan 2,3-dioxygenase Source RGD Symbol Acc 68370
G10	SBR1110132	ENSRNOT00000027682.5	Th	ENSRNOG00000020410	tyrosine hydroxylase Source RGD Symbol Acc 3853
G11	SBR1144493	ENSRNOT00000056109.3	Tph1	ENSRNOG00000011672	tryptophan hydroxylase 1 Source RGD Symbol Acc 3895
G12	SBR1153613	ENSRNOT00000005157.4	Tph2	ENSRNOG00000003880	tryptophan hydroxylase 2 Source RGD Symbol Acc 631332
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG000000034254	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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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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