

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

Rat Dopamine & Serotonin Pathway

Cat. no. 249955 UPRN-158ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR 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	Cdk5	Comt	Creb1	Cyp2d4	Dbb	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	Ilpr1	Maob	Maob	Mapk1	Nr4a1	Nr4a3	Pde10a	Pde4a
F	Pde4b	Pde4c	Pde4d	Pdyn	Pik3ca	Pik3cg	Pla2g5	Plcb1	Plcb2	Plcb3	Ppp1r1b	Prkaca
G	Ptgs2	Slc18a1	Slc18a2	Slc6a3	Slc6a4	Sncg	Sncg	Syn2	Tdo2	Th	Tph1	Tph2
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1014500	ENSRNOT00000088032.1	Adcy1	ENSRNOG0000059479	adenylate cyclase 1 Source RGD Symbol Acc 1309318
A02	UPFR1049460	ENSRNOT00000047627.3	Adcy2	ENSRNOG0000032150	adenylate cyclase 2 Source RGD Symbol Acc 619965
A03	UPFR1089457	ENSRNOT00000005389.6	Adcy3	ENSRNOG0000003999	adenylate cyclase 3 Source RGD Symbol Acc 71009
A04	UPFR1016362	ENSRNOT00000049180.2	Adcy5	ENSRNOG0000002229	adenylate cyclase 5 Source RGD Symbol Acc 71014
A05	UPFR1119895	ENSRNOT00000022813.2	Adrb1	ENSRNOG0000017002	adrenoceptor beta 1 Source RGD Symbol Acc 2059
A06	UPFR1035973	ENSRNOT00000026098.3	Adrb2	ENSRNOG0000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A07	UPFR1095914	ENSRNOT00000025847.7	Grk2	ENSRNOG0000018985	G protein-coupled receptor kinase 2 Source RGD Symbol Acc 2062
A08	UPFR1057533	ENSRNOT00000082322.1	Grk3	ENSRNOG0000059456	G protein-coupled receptor kinase 3 Source RGD Symbol Acc 2063
A09	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A10	UPFR1088137	ENSRNOT00000025303.3	Akt2	ENSRNOG0000018677	AKT serine/threonine kinase 2 Source RGD Symbol Acc 2082
A11	UPFR1105050	ENSRNOT00000085648.1	Akt3	ENSRNOG0000021497	AKT serine/threonine kinase 3 Source RGD Symbol Acc 62390
A12	UPFR1014248	ENSRNOT00000033098.5	Alox12	ENSRNOG0000027037	arachidonate 12-lipoxygenase, 12S type Source RGD Symbol Acc 1311159
B01	UPFR1021296	ENSRNOT00000044081.5	App	ENSRNOG0000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
B02	UPFR1122474	ENSRNOT00000043554.4	Arrb1	ENSRNOG0000030404	arrestin, beta 1 Source RGD Symbol Acc 2156
B03	UPFR1107442	ENSRNOT00000026207.7	Arrb2	ENSRNOG0000019308	arrestin, beta 2 Source RGD Symbol Acc 2157
B04	UPFR1014257	ENSRNOT00000078543.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
B05	UPFR1030802	ENSRNOT00000083448.1	Cacna1a	ENSRNOG0000052707	calcium voltage-gated channel subunit alpha1 A Source RGD Symbol Acc 2244
B06	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B07	UPFR1040918	ENSRNOT000000111052.4	Cdk5	ENSRNOG0000008017	cyclin-dependent kinase 5 Source RGD Symbol Acc 70514
B08	UPFR1106463	ENSRNOT00000050269.5	Comt	ENSRNOG0000001889	catechol-O-methyltransferase Source RGD Symbol Acc 2379
B09	UPFR1042088	ENSRNOT00000018326.5	Creb1	ENSRNOG0000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B10	UPFR1014363	ENSRNOT000000111880.6	Cyp2d4	ENSRNOG0000032261	cytochrome P450, family 2, subfamily d, polypeptide 4 Source RGD Symbol Acc 620640
B11	UPFR1111093	ENSRNOT00000070887.2	Dbh	ENSRNOG0000006641	dopamine beta-hydroxylase Source RGD Symbol Acc 2489
B12	UPFR1086801	ENSRNOT00000057051.4	Ddc	ENSRNOG0000004327	dopa decarboxylase Source RGD Symbol Acc 2494
C01	UPFR1098242	ENSRNOT00000030893.3	Drd1	ENSRNOG0000023688	dopamine receptor D1 Source RGD Symbol Acc 2518
C02	UPFR1040837	ENSRNOT00000045944.5	Drd2	ENSRNOG0000008428	dopamine receptor D2 Source RGD Symbol Acc 2520
C03	UPFR1069054	ENSRNOT00000089057.1	Drd3	ENSRNOG0000060806	dopamine receptor D3 Source RGD Symbol Acc 2521
C04	UPFR1023370	ENSRNOT00000024137.4	Drd4	ENSRNOG0000017927	dopamine receptor D4 Source RGD Symbol Acc 2522
C05	UPFR1113428	ENSRNOT00000007074.2	Drd5	ENSRNOG0000005338	dopamine receptor D5 Source RGD Symbol Acc 2523
C06	UPFR1053812	ENSRNOT00000005383.5	Dusp1	ENSRNOG0000003977	dual specificity phosphatase 1 Source RGD Symbol Acc 620897
C07	UPFR1058932	ENSRNOT00000010634.5	Ephb1	ENSRNOG0000007865	Eph receptor B1 Source RGD Symbol Acc 2556
C08	UPFR1045359	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C09	UPFR1111724	ENSRNOT00000041288.2	Gdnf	ENSRNOG0000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
C10	UPFR1036658	ENSRNOT00000034401.5	Gfap	ENSRNOG0000002919	glial fibrillary acidic protein Source RGD Symbol Acc 2679
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1050217	015894.4	Grk4	000011847	G protein-coupled receptor kinase 4 Source RGD Symbol Acc 61858
C12	UPFR1085382	ENSRNOT00000 015687.6	Grk5	ENSRNOG00 000011439	G protein-coupled receptor kinase 5 Source RGD Symbol Acc 61985
D01	UPFR1038744	ENSRNOT00000 079063.1	Grk6	ENSRNOG00 000014615	G protein-coupled receptor kinase 6 Source RGD Symbol Acc 61986
D02	UPFR1081475	ENSRNOT00000 027677.5	Gsk3a	ENSRNOG00 000020417	glycogen synthase kinase 3 alpha Source RGD Symbol Acc 620351
D03	UPFR1109626	ENSRNOT00000 077612.1	Gsk3b	ENSRNOG00 000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
D04	UPFR1088882	ENSRNOT00000 013618.2	Htr1a	ENSRNOG00 000010254	5-hydroxytryptamine receptor 1A Source RGD Symbol Acc 2845
D05	UPFR1111387	ENSRNOT00000 017411.3	Htr1b	ENSRNOG00 000013042	5-hydroxytryptamine receptor 1B Source RGD Symbol Acc 2846
D06	UPFR1072282	ENSRNOT00000 016046.2	Htr1d	ENSRNOG00 000012038	5-hydroxytryptamine receptor 1D Source RGD Symbol Acc 2847
D07	UPFR1057352	ENSRNOT00000 000907.5	Htr1f	ENSRNOG00 000000716	5-hydroxytryptamine receptor 1F Source RGD Symbol Acc 71083
D08	UPFR1042475	ENSRNOT00000 013408.6	Htr2a	ENSRNOG00 000010063	5-hydroxytryptamine receptor 2A Source RGD Symbol Acc 61800
D09	UPFR1119083	ENSRNOT00000 023829.4	Htr2b	ENSRNOG00 000017625	5-hydroxytryptamine receptor 2B Source RGD Symbol Acc 61801
D10	UPFR1051208	ENSRNOT00000 090922.1	Htr2c	ENSRNOG00 000030877	5-hydroxytryptamine receptor 2C Source RGD Symbol Acc 2848
D11	UPFR1055375	ENSRNOT00000 008965.4	Htr3a	ENSRNOG00 000006595	5-hydroxytryptamine receptor 3A Source RGD Symbol Acc 61818
D12	UPFR1058908	ENSRNOT00000 009574.2	Htr3b	ENSRNOG00 000006920	5-hydroxytryptamine receptor 3B Source RGD Symbol Acc 61820
E01	UPFR1102556	ENSRNOT00000 025892.5	Htr4	ENSRNOG00 000019134	5-hydroxytryptamine receptor 4 Source RGD Symbol Acc 2850
E02	UPFR1093076	ENSRNOT00000 009317.2	Htr5a	ENSRNOG00 000007066	5-hydroxytryptamine receptor 5A Source RGD Symbol Acc 2851
E03	UPFR1036057	ENSRNOT00000 070865.2	Htr6	ENSRNOG00 000049761	5-hydroxytryptamine receptor 6 Source RGD Symbol Acc 62044
E04	UPFR1107332	ENSRNOT00000 025450.7	Htr7	ENSRNOG00 000018827	5-hydroxytryptamine receptor 7 Source RGD Symbol Acc 71034
E05	UPFR1103770	ENSRNOT00000 064025.3	Itpr1	ENSRNOG00 000007104	inositol 1,4,5-trisphosphate receptor, type 1 Source RGD Symbol Acc 2933
E06	UPFR1111375	ENSRNOT00000 066674.2	Maoa	ENSRNOG00 000002848	monoamine oxidase A Source RGD Symbol Acc 61898
E07	UPFR1081997	ENSRNOT00000 044009.5	Maob	ENSRNOG00 000029778	monoamine oxidase B Source RGD Symbol Acc 3041
E08	UPFR1055882	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
E09	UPFR1086234	ENSRNOT00000 010171.4	Nr4a1	ENSRNOG00 000007607	nuclear receptor subfamily 4, group A, member 1 Source RGD Symbol Acc 620029
E10	UPFR1110151	ENSRNOT00000 008302.4	Nr4a3	ENSRNOG00 000005964	nuclear receptor subfamily 4, group A, member 3 Source RGD Symbol Acc 61882
E11	UPFR1058585	ENSRNOT00000 067142.4	Pde10a	ENSRNOG00 000011310	phosphodiesterase 10A Source RGD Symbol Acc 68434
E12	UPFR1077055	ENSRNOT00000 061100.5	Pde4a	ENSRNOG00 000020828	phosphodiesterase 4A Source RGD Symbol Acc 3279
F01	UPFR1091259	ENSRNOT00000 008278.6	Pde4b	ENSRNOG00 000005905	phosphodiesterase 4B Source RGD Symbol Acc 3280
F02	UPFR1086589	ENSRNOT00000 026457.6	Pde4c	ENSRNOG00 000019518	phosphodiesterase 4C Source RGD Symbol Acc 727918
F03	UPFR1060904	ENSRNOT00000 015138.8	Pde4d	ENSRNOG00 000042536	phosphodiesterase 4D Source RGD Symbol Acc 3281
F04	UPFR1018344	ENSRNOT00000 037576.3	Pdyn	ENSRNOG00 000026036	prodynorphin Source RGD Symbol Acc 62054
F05	UPFR1035210	ENSRNOT00000 083720.1	Pik3ca	ENSRNOG00 000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
F06	UPFR1091290	ENSRNOT00000 012487.5	Pik3cg	ENSRNOG00 000009385	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma Source RGD Symbol Acc 1306468
F07	UPFR1033443	ENSRNOT00000 022716.5	Pla2g5	ENSRNOG00 000016838	phospholipase A2, group V Source RGD Symbol Acc 62051
F08	UPFR1112999	ENSRNOT00000 006389.6	Plcb1	ENSRNOG00 000004810	phospholipase C beta 1 Source RGD Symbol Acc 3344
F09	UPFR1082452	ENSRNOT00000 078037.1	Plcb2	ENSRNOG00 000058337	phospholipase C, beta 2 Source RGD Symbol Acc 621004
F10	UPFR1079558	ENSRNOT00000 028720.6	Plcb3	ENSRNOG00 000021150	phospholipase C beta 3 Source RGD Symbol Acc 61993

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1105764	ENSRNOT00000037752.3	Ppp1r1b	ENSRNOG00000028404	protein phosphatase 1, regulatory (inhibitor) subunit 1B Source RGD Symbol Acc 621859
F12	UPFR1048640	ENSRNOT00000041717.4	Prkaca	ENSRNOG00000005257	protein kinase cAMP-activated catalytic subunit alpha Source RGD Symbol Acc 3389
G01	UPFR1035449	ENSRNOT00000003567.4	Ptgs2	ENSRNOG00000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
G02	UPFR1114817	ENSRNOT00000016193.3	Slc18a1	ENSRNOG00000011992	solute carrier family 18 member A1 Source RGD Symbol Acc 3693
G03	UPFR1012902	ENSRNOT00000011983.2	Slc18a2	ENSRNOG00000008890	solute carrier family 18 member A2 Source RGD Symbol Acc 3694
G04	UPFR1108894	ENSRNOT00000040291.1	Slc6a3	ENSRNOG00000017302	solute carrier family 6 member 3 Source RGD Symbol Acc 3715
G05	UPFR1058597	ENSRNOT00000004717.6	Slc6a4	ENSRNOG00000003476	solute carrier family 6 member 4 Source RGD Symbol Acc 3714
G06	UPFR1068205	ENSRNOT00000039247.2	Snca	ENSRNOG00000008656	synuclein alpha Source RGD Symbol Acc 3729
G07	UPFR1021695	ENSRNOT00000082760.1	Sncap	ENSRNOG00000018254	synuclein, alpha interacting protein Source RGD Symbol Acc 1309283
G08	UPFR1046500	ENSRNOT00000011292.2	Syn2	ENSRNOG00000008157	synapsin II Source RGD Symbol Acc 3798
G09	UPFR1114440	ENSRNOT00000015732.3	Tdo2	ENSRNOG00000011612	tryptophan 2,3-dioxygenase Source RGD Symbol Acc 68370
G10	UPFR1024503	ENSRNOT00000027682.5	Th	ENSRNOG00000020410	tyrosine hydroxylase Source RGD Symbol Acc 3853
G11	UPFR1071293	ENSRNOT00000056109.3	Tph1	ENSRNOG00000011672	tryptophan hydroxylase 1 Source RGD Symbol Acc 3895
G12	UPFR1101864	ENSRNOT00000005157.4	Tph2	ENSRNOG00000003880	tryptophan hydroxylase 2 Source RGD Symbol Acc 631332
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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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