

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

Rat Synaptic Plasticity

Cat. no. 249955 UPRN-126ZR

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	Adam10	Adcy1	Adcy8	Akt1	Arc	Bdnf	Camk2a	Camk2g	Cdh2	Cebpb	Cebpd	Cnr1
B	Creb1	Crem	Dlg4	Egr1	Egr2	Egr3	Egr4	Ephb2	Fos	Gabra5	Gnai1	Gria1
C	Gria2	Gria3	Gria4	Grin1	Grin2a	Grin2b	Grin2c	Grin2d	Grip1	Grm1	Grm2	Grm3
D	Grm4	Grm5	Grm7	Grm8	Homer1	Igf1	Inhba	Jun	Junb	Klf10	Mapk1	Mmp9
E	Ncam1	Nfkbl	Nfkbb	Ngf	Ngfr	Nos1	Nptx2	Nr4a1	Ntf3	Ntf4	Ntrk2	Pcdh8
F	Pick1	Pim1	Plat	Plcg1	Ppp1ca	Ppp1cc	Ppp1r14a	LOC103694903	Ppp3ca	Prkca	Prkcg	AABR07006727.1
G	Rab3a	Rela	Reln	Kif17	Rgs2	Rheb	AABR07044925.1	Srf	Sympo	Timp1	LOC103694380	Ywhaq
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	UPFR1053711	ENSRNOT00000083255.1	Adam10	ENSRNOG0000054257	ADAM metallopeptidase domain 10 Source RGD Symbol Acc 2032
A02	UPFR1014500	ENSRNOT00000088032.1	Adcy1	ENSRNOG0000059479	adenylate cyclase 1 Source RGD Symbol Acc 1309318
A03	UPFR1118087	ENSRNOT00000006789.6	Adcy8	ENSRNOG0000004890	adenylate cyclase 8 Source RGD Symbol Acc 2036
A04	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A05	UPFR1079926	ENSRNOT00000076998.2	Arc	ENSRNOG0000043465	activity-regulated cytoskeleton-associated protein Source RGD Symbol Acc 62037
A06	UPFR1014257	ENSRNOT00000078543.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A07	UPFR1027233	ENSRNOT00000041533.5	Camk2a	ENSRNOG0000018712	calcium/calmodulin-dependent protein kinase II alpha Source RGD Symbol Acc 2261
A08	UPFR1112789	ENSRNOT00000066163.4	Camk2g	ENSRNOG0000009783	calcium/calmodulin-dependent protein kinase II gamma Source RGD Symbol Acc 621802
A09	UPFR1054833	ENSRNOT00000021170.6	Cdh2	ENSRNOG0000015602	cadherin 2 Source RGD Symbol Acc 69280
A10	UPFR1126579	ENSRNOT00000083876.1	Cebpb	ENSRNOG0000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
A11	UPFR1073105	ENSRNOT00000074586.2	Cebpd	ENSRNOG0000050869	CCAAT/enhancer binding protein delta Source RGD Symbol Acc 2328
A12	UPFR1028958	ENSRNOT00000010850.2	Cnr1	ENSRNOG0000008223	cannabinoid receptor 1 Source RGD Symbol Acc 2369
B01	UPFR1042088	ENSRNOT00000018326.5	Creb1	ENSRNOG0000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B02	UPFR1048690	ENSRNOT00000020204.6	Crem	ENSRNOG0000014900	cAMP responsive element modulator Source RGD Symbol Acc 2402
B03	UPFR1051584	ENSRNOT00000068493.2	Dlg4	ENSRNOG0000018526	discs large MAGUK scaffold protein 4 Source RGD Symbol Acc 68424
B04	UPFR1034050	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
B05	UPFR1023028	ENSRNOT00000000792.4	Egr2	ENSRNOG0000000640	early growth response 2 Source RGD Symbol Acc 621608
B06	UPFR1017383	ENSRNOT00000024067.5	Egr3	ENSRNOG0000017828	early growth response 3 Source RGD Symbol Acc 2545
B07	UPFR1126557	ENSRNOT00000021097.3	Egr4	ENSRNOG0000015719	early growth response 4 Source RGD Symbol Acc 2546
B08	UPFR1073590	ENSRNOT00000089574.1	Ephb2	ENSRNOG0000012531	Eph receptor B2 Source RGD Symbol Acc 1564232
B09	UPFR1045359	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
B10	UPFR1114425	ENSRNOT00000083894.1	Gabra5	ENSRNOG0000010803	gamma-aminobutyric acid type A receptor alpha 5 subunit Source RGD Symbol Acc 61859
B11	UPFR1071302	ENSRNOT00000091004.1	Gnai1	ENSRNOG0000057096	G protein subunit alpha i1 Source RGD Symbol Acc 2713
B12	UPFR1117301	ENSRNOT00000081136.1	Gria1	ENSRNOG0000045816	glutamate ionotropic receptor AMPA type subunit 1 Source RGD Symbol Acc 621531
C01	UPFR1039996	ENSRNOT00000083361.1	Gria2	ENSRNOG0000054204	glutamate ionotropic receptor AMPA type subunit 2 Source RGD Symbol Acc 61862
C02	UPFR1047643	ENSRNOT00000010367.6	Gria3	ENSRNOG0000007682	glutamate ionotropic receptor AMPA type subunit 3 Source RGD Symbol Acc 70958
C03	UPFR1073036	ENSRNOT00000081171.1	Gria4	ENSRNOG0000006957	glutamate ionotropic receptor AMPA type subunit 4 Source RGD Symbol Acc 61863
C04	UPFR1041053	ENSRNOT00000049297.3	Grin1	ENSRNOG0000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
C05	UPFR1093256	ENSRNOT00000044626.3	Grin2a	ENSRNOG0000033942	glutamate ionotropic receptor NMDA type subunit 2A Source RGD Symbol Acc 2737
C06	UPFR1071315	ENSRNOT00000011697.4	Grin2b	ENSRNOG0000008766	glutamate ionotropic receptor NMDA type subunit 2B Source RGD Symbol Acc 2738
C07	UPFR1078301	ENSRNOT00000004477.5	Grin2c	ENSRNOG0000003280	glutamate ionotropic receptor NMDA type subunit 2C Source RGD Symbol Acc 2739
C08	UPFR1104036	ENSRNOT00000028615.4	Grin2d	ENSRNOG0000021063	glutamate ionotropic receptor NMDA type subunit 2D Source RGD Symbol Acc 2740
C09	UPFR1119589	ENSRNOT00000005545.5	Grip1	ENSRNOG0000004013	glutamate receptor interacting protein 1 Source RGD Symbol Acc 621667
C10	UPFR1030956	ENSRNOT00000044325.3	Grm1	ENSRNOG0000014290	glutamate metabotropic receptor 1 Source RGD Symbol Acc 2742
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1059414	017607.3	Grm2	000013171	glutamate metabotropic receptor 2 Source RGD Symbol Acc 2743
C12	UPFR1061070	ENSRNOT00000007572.7	Grm3	ENSRNOG0000005519	glutamate metabotropic receptor 3 Source RGD Symbol Acc 2744
D01	UPFR1013959	ENSRNOT00000093633.1	Grm4	ENSRNOG0000000487	glutamate metabotropic receptor 4 Source RGD Symbol Acc 2745
D02	UPFR1073288	ENSRNOT00000050639.2	Grm5	ENSRNOG0000016429	glutamate metabotropic receptor 5 Source RGD Symbol Acc 2746
D03	UPFR1112528	ENSRNOT00000056570.3	Grm7	ENSRNOG0000005662	glutamate metabotropic receptor 7 Source RGD Symbol Acc 619857
D04	UPFR1086185	ENSRNOT00000031714.4	Grm8	ENSRNOG0000021468	glutamate metabotropic receptor 8 Source RGD Symbol Acc 619858
D05	UPFR1023875	ENSRNOT00000071804.3	Homer1	ENSRNOG0000047014	homer scaffold protein 1 Source RGD Symbol Acc 628725
D06	UPFR1050099	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D07	UPFR1022215	ENSRNOT00000019272.5	Inhba	ENSRNOG0000014320	inhibin subunit beta A Source RGD Symbol Acc 62074
D08	UPFR1037970	ENSRNOT00000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D09	UPFR1102181	ENSRNOT00000067780.3	Junb	ENSRNOG0000042838	JunB proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2944
D10	UPFR1058184	ENSRNOT00000008350.3	Klf10	ENSRNOG0000006118	Kruppel-like factor 10 Source RGD Symbol Acc 621652
D11	UPFR1055882	ENSRNOT00000002533.7	Mapk1	ENSRNOG0000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D12	UPFR1032957	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
E01	UPFR1059961	ENSRNOT00000042281.6	Ncam1	ENSRNOG00000031890	neural cell adhesion molecule 1 Source RGD Symbol Acc 67378
E02	UPFR1116688	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E03	UPFR1013391	ENSRNOT00000027212.5	Nfkbib	ENSRNOG0000020063	NFkB inhibitor beta Source RGD Symbol Acc 621887
E04	UPFR1044499	ENSRNOT00000022200.6	Ngf	ENSRNOG0000016571	nerve growth factor Source RGD Symbol Acc 1598328
E05	UPFR1048810	ENSRNOT00000007268.3	Ngfr	ENSRNOG0000005392	nerve growth factor receptor Source RGD Symbol Acc 3177
E06	UPFR1080946	ENSRNOT00000001493.8	Nos1	ENSRNOG0000001130	nitric oxide synthase 1 Source RGD Symbol Acc 3184
E07	UPFR1073156	ENSRNOT00000001331.4	Nptx2	ENSRNOG0000001006	neuronal pentraxin 2 Source RGD Symbol Acc 1309447
E08	UPFR1086234	ENSRNOT00000010171.4	Nr4a1	ENSRNOG0000007607	nuclear receptor subfamily 4, group A, member 1 Source RGD Symbol Acc 620029
E09	UPFR1101598	ENSRNOT000000087115.1	Ntf3	ENSRNOG0000019716	neurotrophin 3 Source RGD Symbol Acc 619728
E10	UPFR1083073	ENSRNOT00000028194.2	Ntf4	ENSRNOG0000020783	neurotrophin 4 Source RGD Symbol Acc 3212
E11	UPFR1075665	ENSRNOT00000042145.2	Ntrk2	ENSRNOG0000018839	neurotrophic receptor tyrosine kinase 2 Source RGD Symbol Acc 3213
E12	UPFR1076628	ENSRNOT00000017599.3	Pcdh8	ENSRNOG0000013101	protocadherin 8 Source RGD Symbol Acc 69350
F01	UPFR1115203	ENSRNOT00000016077.6	Pick1	ENSRNOG0000011507	protein interacting with PRKCA 1 Source RGD Symbol Acc 69437
F02	UPFR1098497	ENSRNOT00000000637.5	Pim1	ENSRNOG0000000529	Pim-1 proto-oncogene, serine/threonine kinase Source RGD Symbol Acc 3330
F03	UPFR1085291	ENSRNOT00000025763.6	Plat	ENSRNOG0000019018	plasminogen activator, tissue type Source RGD Symbol Acc 3342
F04	UPFR1035470	ENSRNOT00000078909.1	Plcg1	ENSRNOG0000051490	phospholipase C, gamma 1 Source RGD Symbol Acc 3347
F05	UPFR1024682	ENSRNOT00000091680.1	Ppp1ca	ENSRNOG0000018708	protein phosphatase 1 catalytic subunit alpha Source RGD Symbol Acc 3375
F06	UPFR1023076	ENSRNOT00000078761.1	Ppp1cc	ENSRNOG0000001269	protein phosphatase 1 catalytic subunit gamma Source RGD Symbol Acc 3377
F07	UPFR1033940	ENSRNOT00000028070.3	Ppp1r14a	ENSRNOG0000020676	protein phosphatase 1, regulatory (inhibitor) subunit 14A Source RGD Symbol Acc 620536
F08	UPFR1111771	ENSRNOT00000007621.5	LOC103694903	ENSRNOG0000005389	serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform Source RGD Symbol Acc 9257421
F09	UPFR1110596	ENSRNOT00000047975.5	Ppp3ca	ENSRNOG0000009882	protein phosphatase 3 catalytic subunit alpha Source RGD Symbol Acc 3382
F10	UPFR1034906	ENSRNOT00000004699.8	Prkca	ENSRNOG0000003491	protein kinase C, alpha Source RGD Symbol Acc 3395

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1032334	ENSRNOT00000080032.1	Prkcg	ENSRNOG0000054371	protein kinase C, gamma Source RGD Symbol Acc 3397
F12	UPFR1096562	ENSRNOT00000082874.1	AABR07006727.1	ENSRNOG0000052057	
G01	UPFR1080716	ENSRNOT00000026391.6	Rab3a	ENSRNOG0000019433	RAB3A, member RAS oncogene family Source RGD Symbol Acc 3528
G02	UPFR1070877	ENSRNOT00000045233.3	Rela	ENSRNOG0000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
G03	UPFR1088760	ENSRNOT00000010521.8	Reln	ENSRNOG0000021441	reelin Source RGD Symbol Acc 3553
G04	UPFR1110656	ENSRNOT00000020215.5	Kif17	ENSRNOG0000014970	kinesin family member 17 Source RGD Symbol Acc 1562511
G05	UPFR1098819	ENSRNOT00000005156.6	Rgs2	ENSRNOG0000003687	regulator of G-protein signaling 2 Source RGD Symbol Acc 621665
G06	UPFR1054131	ENSRNOT00000071737.2	Rheb	ENSRNOG0000050578	Ras homolog, mTORC1 binding Source RGD Symbol Acc 621840
G07	UPFR1112360	ENSRNOT00000078739.1	AABR07044925.1	ENSRNOG0000051592	sirtuin 1 Source NCBI gene Acc 309757
G08	UPFR1072279	ENSRNOT00000061430.3	Srf	ENSRNOG0000018232	serum response factor Source RGD Symbol Acc 1559787
G09	UPFR1122400	ENSRNOT00000064686.1	Synpo	ENSRNOG0000019181	synaptopodin Source RGD Symbol Acc 620668
G10	UPFR1060230	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G11	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G12	UPFR1049382	ENSRNOT00000077786.1	Ywhaq	ENSRNOG0000051650	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta Source RGD Symbol Acc 3979
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	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 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 Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.