

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

Rat Nitric Oxide Signaling Pathway

Cat. no. 249955 UPRN-062ZR

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	Aass	Als2	Apoe	Bax	Bd211	Calm1	LOC1009123 80	Cat	Cav1	Ccnd1	Ccng1	Ccs
B	LOC1009117 30	Cdkn1a	Clcf1	Ctsb	Cyba	Ddah1	Ddah2	Dlg4	Dynll1	Egr1	Epx	Ercc2
C	Fas	Fos	Gab1	Gadd45a	Gpx1	Gpx2	Gpx3	Gpx4	Gpx5	Gpx6	Gpx7	Grin1
D	AABR0703521 8.1	Hpn	Idh1	Irgm	Mdm2	Med4	Mpo	Myc	AABR0702140 2.1	Nedd1	Nos1	LOC1003610 87
E	Nos2	Nos3	Nox1	Nox4	Noxa1	Noxo1	Nqa1	Nudh15	Pea15	Ppp1r15b	Ppp3ca	Prdx1
F	Prdx2	Prdx6	Prkaca	Prnp	Prpf4	Psmb5	Rb1	Recq14	Rprm	Rras	Rrp1	Scd2
G	Scd	Scd4	Sfn	Sod1	Sod2	Sod3	Tp53	Tpo	Txnip	Txnrd2	Ubc	Ucp3
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	UPFR1017405	ENSRNOT00000060530.4	Aass	ENSRNOG0000039494	aminoadipate-semialdehyde synthase Source RGD Symbol Acc 1310811
A02	UPFR1116953	ENSRNOT00000088729.1	Als2	ENSRNOG0000023280	ALS2, alsin Rho guanine nucleotide exchange factor Source RGD Symbol Acc 1310372
A03	UPFR1073431	ENSRNOT00000091574.1	Apoe	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A04	UPFR1074536	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A05	UPFR1047186	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A06	UPFR1026228	ENSRNOT00000064679.2	Calm1	ENSRNOG0000004060	calmodulin 2 Source RGD Symbol Acc 2258
A07	UPFR1089439	ENSRNOT00000072756.1	LOC100912380	ENSRNOG0000045747	calpain small subunit 1-like Source RGD Symbol Acc 6487412
A08	UPFR1119733	ENSRNOT00000011230.5	Cat	ENSRNOG0000008364	catalase Source RGD Symbol Acc 2279
A09	UPFR1012931	ENSRNOT00000078250.1	Cav1	ENSRNOG0000056836	caveolin 1 Source RGD Symbol Acc 2280
A10	UPFR1042457	ENSRNOT00000088588.1	Ccnd1	ENSRNOG0000020918	cyclin D1 Source RGD Symbol Acc 68384
A11	UPFR1113303	ENSRNOT00000079646.1	Ccng1	ENSRNOG0000003256	cyclin G1 Source RGD Symbol Acc 2295
A12	UPFR1035526	ENSRNOT00000073983.2	Ccs	ENSRNOG0000047816	copper chaperone for superoxide dismutase Source RGD Symbol Acc 620403
B01	UPFR1080702	ENSRNOT00000072434.2	LOC10091730	ENSRNOG0000046094	CD151 molecule (Raph blood group) Source RGD Symbol Acc 621290
B02	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B03	UPFR1028075	ENSRNOT00000025342.7	Clcf1	ENSRNOG0000018752	cardiotrophin-like cytokine factor 1 Source RGD Symbol Acc 1303171
B04	UPFR1121227	ENSRNOT00000014177.5	Ctsb	ENSRNOG0000010331	cathepsin B Source RGD Symbol Acc 621509
B05	UPFR1109790	ENSRNOT00000017564.6	Cyba	ENSRNOG0000013014	cytochrome b-245 alpha chain Source RGD Symbol Acc 620573
B06	UPFR1026489	ENSRNOT00000045016.4	Ddah1	ENSRNOG0000014613	dimethylarginine dimethylaminohydrolase 1 Source RGD Symbol Acc 70968
B07	UPFR1023615	ENSRNOT00000083353.1	Ddah2	ENSRNOG0000000842	dimethylarginine dimethylaminohydrolase 2 Source RGD Symbol Acc 1302955
B08	UPFR1051584	ENSRNOT00000068493.2	Dlg4	ENSRNOG0000018526	discs large MAGUK scaffold protein 4 Source RGD Symbol Acc 68424
B09	UPFR1093728	ENSRNOT00000014910.5	Dynll1	ENSRNOG0000011222	dynein light chain LC8-type 1 Source RGD Symbol Acc 619866
B10	UPFR1034050	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
B11	UPFR1065428	ENSRNOT00000011735.4	Epx	ENSRNOG0000008707	eosinophil peroxidase Source RGD Symbol Acc 1311882
B12	UPFR1023073	ENSRNOT00000024246.7	Ercc2	ENSRNOG0000017753	ERCC excision repair 2, TFIIH core complex helicase subunit Source RGD Symbol Acc 1309109
C01	UPFR1075141	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C02	UPFR1045359	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C03	UPFR1032475	ENSRNOT00000083219.1	Gab1	ENSRNOG0000017879	GRB2-associated binding protein 1 Source RGD Symbol Acc 1311085
C04	UPFR1092990	ENSRNOT00000007698.6	Gadd45a	ENSRNOG0000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
C05	UPFR1108384	ENSRNOT00000073247.2	Gpx1	ENSRNOG0000048812	glutathione peroxidase 1 Source RGD Symbol Acc 2729
C06	UPFR1055910	ENSRNOT00000080270.1	Gpx2	ENSRNOG0000055672	glutathione peroxidase 2 Source RGD Symbol Acc 727780
C07	UPFR1072810	ENSRNOT00000079830.1	Gpx3	ENSRNOG0000052564	glutathione peroxidase 3 Source RGD Symbol Acc 69224
C08	UPFR1055483	ENSRNOT00000093632.1	Gpx4	ENSRNOG0000013604	glutathione peroxidase 4 Source RGD Symbol Acc 69226
C09	UPFR1087326	ENSRNOT00000081408.1	Gpx5	ENSRNOG0000057180	glutathione peroxidase 5 Source RGD Symbol Acc 69227
C10	UPFR1074239	ENSRNOT00000079035.1	Gpx6	ENSRNOG0000060749	glutathione peroxidase 6 Source RGD Symbol Acc 628789
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1100273	013913.6	Gpx7	000009751	glutathione peroxidase 7 Source RGD Symbol Acc 1306999
C12	UPFR1041053	ENSRNOT00000049297.3	Grin1	ENSRNOG0000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
D01	UPFR1108191	ENSRNOT00000047163.4	AABR07035218.1	ENSRNOG00000029813	
D02	UPFR1106487	ENSRNOT00000028644.6	Hpn	ENSRNOG00000021097	hepsin Source RGD Symbol Acc 61982
D03	UPFR1044022	ENSRNOT00000020322.5	ldh1	ENSRNOG00000015020	isocitrate dehydrogenase (NADP(+)) 1, cytosolic Source RGD Symbol Acc 2862
D04	UPFR1059248	ENSRNOT00000045545.3	Irgm	ENSRNOG00000031138	immunity-related GTPase M Source RGD Symbol Acc 1305163
D05	UPFR1073822	ENSRNOT00000066767.2	Mdm2	ENSRNOG0000006304	MDM2 proto-oncogene Source RGD Symbol Acc 1305332
D06	UPFR1046370	ENSRNOT00000023195.5	Med4	ENSRNOG00000017170	mediator complex subunit 4 Source RGD Symbol Acc 1306671
D07	UPFR1055988	ENSRNOT00000065910.3	Mpo	ENSRNOG0000008310	myeloperoxidase Source RGD Symbol Acc 1592081
D08	UPFR1101439	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
D09	UPFR1056378	ENSRNOT00000066331.2	AABR07021402.1	ENSRNOG00000028016	neutrophil cytosolic factor 2 Source NCBI gene Acc 364018
D10	UPFR1033281	ENSRNOT00000005463.6	Nedd1	ENSRNOG00000004011	neural precursor cell expressed, developmentally down-regulated 1 Source RGD Symbol Acc 1307750
D11	UPFR1080946	ENSRNOT00000001493.8	Nos1	ENSRNOG00000001130	nitric oxide synthase 1 Source RGD Symbol Acc 3184
D12	UPFR1023550	ENSRNOT00000032218.5	LOC100361087	ENSRNOG00000042929	hypothetical LOC100361087 Source RGD Symbol Acc 2320873
E01	UPFR1092405	ENSRNOT00000016133.6	Nos2	ENSRNOG00000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
E02	UPFR1032783	ENSRNOT00000013058.4	Nos3	ENSRNOG00000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E03	UPFR1027661	ENSRNOT00000075325.1	Nox1	ENSRNOG00000048706	NADPH oxidase 1 Source RGD Symbol Acc 620598
E04	UPFR1087720	ENSRNOT00000018990.6	Nox4	ENSRNOG00000013925	NADPH oxidase 4 Source RGD Symbol Acc 620600
E05	UPFR1089418	ENSRNOT00000012375.5	Noxa1	ENSRNOG00000009286	NADPH oxidase activator 1 Source RGD Symbol Acc 1306687
E06	UPFR1089689	ENSRNOT00000029652.3	Noxo1	ENSRNOG00000025117	NADPH oxidase organizer 1 Source RGD Symbol Acc 1307802
E07	UPFR1111217	ENSRNOT00000017174.5	Nqo1	ENSRNOG00000012772	NAD(P)H quinone dehydrogenase 1 Source RGD Symbol Acc 2503
E08	UPFR1085966	ENSRNOT00000038436.4	Nudt15	ENSRNOG00000025239	nudix hydrolase 15 Source RGD Symbol Acc 1308292
E09	UPFR1065343	ENSRNOT00000070812.1	Pea15	ENSRNOG00000046996	proliferation and apoptosis adaptor protein 15 Source RGD Symbol Acc 1306055
E10	UPFR1099808	ENSRNOT00000037039.6	Ppp1r15b	ENSRNOG00000028493	protein phosphatase 1, regulatory subunit 15B Source RGD Symbol Acc 1307944
E11	UPFR1110596	ENSRNOT00000047975.5	Ppp3ca	ENSRNOG0000009882	protein phosphatase 3 catalytic subunit alpha Source RGD Symbol Acc 3382
E12	UPFR1112300	ENSRNOT00000023132.5	Prdx1	ENSRNOG00000017194	peroxiredoxin 1 Source RGD Symbol Acc 620039
F01	UPFR1094945	ENSRNOT00000004799.5	Prdx2	ENSRNOG00000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
F02	UPFR1087261	ENSRNOT00000034583.6	Prdx6	ENSRNOG0000002896	peroxiredoxin 6 Source RGD Symbol Acc 71005
F03	UPFR1048640	ENSRNOT00000041717.4	Prkaca	ENSRNOG0000005257	protein kinase cAMP-activated catalytic subunit alpha Source RGD Symbol Acc 3389
F04	UPFR1114564	ENSRNOT00000028881.2	Pmp	ENSRNOG00000021259	prion protein Source RGD Symbol Acc 3410
F05	UPFR1032578	ENSRNOT00000019910.5	Prpf4	ENSRNOG00000014777	pre-mRNA processing factor 4 Source RGD Symbol Acc 1311303
F06	UPFR1121254	ENSRNOT00000018005.7	Psmb5	ENSRNOG00000013386	proteasome subunit beta 5 Source RGD Symbol Acc 61879
F07	UPFR1039430	ENSRNOT00000021752.5	Rb1	ENSRNOG00000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F08	UPFR1038535	ENSRNOT00000045135.4	Recq14	ENSRNOG00000032446	RecQ like helicase 4 Source RGD Symbol Acc 1307732
F09	UPFR1032277	ENSRNOT00000006784.3	Rprm	ENSRNOG00000005109	reprimin, TP53 dependent G2 arrest mediator homolog Source RGD Symbol Acc 1595512
F10	UPFR1024079	ENSRNOT00000027809.7	Rras	ENSRNOG00000037247	RAS related Source RGD Symbol Acc 1311443

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1099444	ENSRNOT0000001597.7	Rrp1	ENSRNOG0000001203	ribosomal RNA processing 1 Source RGD Symbol Acc 1307286
F12	UPFR1085793	ENSRNOT00000075397.1	Scd2	ENSRNOG0000046005	stearoyl-Coenzyme A desaturase 2 Source RGD Symbol Acc 621177
G01	UPFR1069413	ENSRNOT00000018447.5	Scd	ENSRNOG0000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
G02	UPFR1040186	ENSRNOT00000017834.6	Scd4	ENSRNOG0000032554	stearoyl-coenzyme A desaturase 4 Source RGD Symbol Acc 1563648
G03	UPFR1042676	ENSRNOT00000043959.4	Sfn	ENSRNOG0000033153	stratifin Source RGD Symbol Acc 1304729
G04	UPFR1062096	ENSRNOT00000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731
G05	UPFR1090502	ENSRNOT00000025794.4	Sod2	ENSRNOG0000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
G06	UPFR1098616	ENSRNOT00000005155.3	Sod3	ENSRNOG0000003869	superoxide dismutase 3 Source RGD Symbol Acc 3733
G07	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G08	UPFR1107871	ENSRNOT00000006526.3	Tpo	ENSRNOG0000004646	thyroid peroxidase Source RGD Symbol Acc 3900
G09	UPFR1099909	ENSRNOT00000028793.6	Txnip	ENSRNOG0000021201	thioredoxin interacting protein Source RGD Symbol Acc 620886
G10	UPFR1034288	ENSRNOT00000002593.7	Txnd2	ENSRNOG0000001890	thioredoxin reductase 2 Source RGD Symbol Acc 61960
G11	UPFR1118096	ENSRNOT00000085692.1	Ubc	ENSRNOG0000057823	ubiquitin C Source RGD Symbol Acc 621244
G12	UPFR1091274	ENSRNOT00000024005.5	Ucp3	ENSRNOG0000017716	uncoupling protein 3 Source RGD Symbol Acc 3933
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 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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