

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

## Rat Protease Activated Receptor Signaling

Cat. no. 249955 UPRN-159ZR

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Ady7	Akt1	Cd12	Cd55	Cdkn1a	Csf1	Csf2	Ccn2	Ctsg	Cxcl3	Ccn1	Dkk1
B	Egr1	Elk1	Ets1	F10	F2	F2r	F2r1	F2r2	F2r3	F3	F7	Gata2
C	Gja1	Gnai1	Hbegf	Hmger	Hras	Hspa5	Icam1	Ikbkb	Il10	Il13	Il1b	Il4
D	Il6	Il6d	Il6v	Il6b1	Junb	Kdr	Kilg	Map2k1	Mapk14	LOC103694877	Mmp1	Mmp2
E	Nab2	Nfk1	Nr4a1	Plau	Plaur	Plek	Plg	Prkca	Prkce	Proc	Procr	Ptgs2
F	Plk2	Ptgn1	Rel	Rela	Rhoa	Rhoh	Rps6kb1	S1pr1	S1pr3	Sele	Selp	Serpnb2
G	Serpnb5	Serpine1	Src	Tfpi	Tgfb1	Thbd	Thbs1	LOC103694380	Tp53	Vcam1	Vegfa	Vegfc
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	UPFR1094398	ENSRNOT00000020700.5	Adcy7	ENSRNOG0000014776	adenylate cyclase 7 Source RGD Symbol Acc 619966
A02	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	UPFR1080637	ENSRNOT00000031626.5	Ccl12	ENSRNOG0000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
A04	UPFR1055916	ENSRNOT00000005284.6	Cd55	ENSRNOG0000003927	CD55 molecule Source RGD Symbol Acc 620651
A05	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
A06	UPFR1022984	ENSRNOT00000081835.1	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
A07	UPFR1084630	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
A08	UPFR1047569	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
A09	UPFR1054610	ENSRNOT00000059677.2	Ctsg	ENSRNOG0000020647	cathepsin G Source RGD Symbol Acc 1307681
A10	UPFR1076775	ENSRNOT00000034090.3	Cxcl3	ENSRNOG0000028043	chemokine (C-X-C motif) ligand 3 Source RGD Symbol Acc 621812
A11	UPFR1080474	ENSRNOT00000019501.4	Ccn1	ENSRNOG0000014350	cellular communication network factor 1 Source RGD Symbol Acc 620763
A12	UPFR1075162	ENSRNOT00000015771.7	Dkk1	ENSRNOG0000011692	dickkopf WNT signaling pathway inhibitor 1 Source RGD Symbol Acc 1307313
B01	UPFR1034050	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
B02	UPFR1044171	ENSRNOT00000013522.5	Elk1	ENSRNOG0000010171	ELK1, ETS transcription factor Source RGD Symbol Acc 1598663
B03	UPFR1072908	ENSRNOT00000011925.4	Ets1	ENSRNOG0000008941	ETS proto-oncogene 1, transcription factor Source RGD Symbol Acc 2583
B04	UPFR1074080	ENSRNOT00000026677.6	F10	ENSRNOG0000033444	coagulation factor X Source RGD Symbol Acc 61850
B05	UPFR1087878	ENSRNOT00000022233.5	F2	ENSRNOG0000016325	coagulation factor II Source RGD Symbol Acc 61996
B06	UPFR1094290	ENSRNOT00000074626.2	F2r	ENSRNOG0000048043	coagulation factor II (thrombin) receptor Source RGD Symbol Acc 2586
B07	UPFR1082275	ENSRNOT00000061580.1	F2r1	ENSRNOG0000018003	F2R like trypsin receptor 1 Source RGD Symbol Acc 620866
B08	UPFR1017040	ENSRNOT00000024292.2	F2r2	ENSRNOG0000018054	coagulation factor II (thrombin) receptor-like 2 Source RGD Symbol Acc 620871
B09	UPFR1028842	ENSRNOT00000072664.2	F2r3	ENSRNOG0000048186	F2R like thrombin or trypsin receptor 3 Source RGD Symbol Acc 620872
B10	UPFR1038904	ENSRNOT00000015836.5	F3	ENSRNOG0000011800	coagulation factor III, tissue factor Source RGD Symbol Acc 2587
B11	UPFR1053708	ENSRNOT00000037806.2	F7	ENSRNOG0000032737	coagulation factor VII Source RGD Symbol Acc 628678
B12	UPFR1085619	ENSRNOT00000017240.2	Gata2	ENSRNOG0000012347	GATA binding protein 2 Source RGD Symbol Acc 2664
C01	UPFR1122020	ENSRNOT00000001054.4	Gja1	ENSRNOG0000000805	gap junction protein, alpha 1 Source RGD Symbol Acc 2690
C02	UPFR1071302	ENSRNOT00000091004.1	Gnai1	ENSRNOG0000057096	G protein subunit alpha i1 Source RGD Symbol Acc 2713
C03	UPFR1043686	ENSRNOT00000025157.6	Hbegf	ENSRNOG0000018646	heparin-binding EGF-like growth factor Source RGD Symbol Acc 2526
C04	UPFR1042968	ENSRNOT00000022055.4	Hmgcr	ENSRNOG0000016122	3-hydroxy-3-methylglutaryl-CoA reductase Source RGD Symbol Acc 2803
C05	UPFR1076419	ENSRNOT00000022363.6	Hras	ENSRNOG0000016611	HRas proto-oncogene, GTPase Source RGD Symbol Acc 2827
C06	UPFR1074347	ENSRNOT00000025067.6	Hspa5	ENSRNOG0000018294	heat shock protein family A member 5 Source RGD Symbol Acc 2843
C07	UPFR1031281	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
C08	UPFR1104220	ENSRNOT00000025851.4	Ikbkb	ENSRNOG0000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
C09	UPFR1113235	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
C10	UPFR1038252	ENSRNOT00000010121.2	Il13	ENSRNOG0000007652	interleukin 13 Source RGD Symbol Acc 68949
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1121351	006308.4	Il1b	000004649	interleukin 1 beta Source RGD Symbol Acc 2891
C12	UPFR1099283	ENSRNOT00000 010029.3	Il4	ENSRNOG00 000007624	interleukin 4 Source RGD Symbol Acc 2898
D01	UPFR1098910	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D02	UPFR1089159	ENSRNOT00000 026748.4	Itgad	ENSRNOG00 000019728	integrin subunit alpha M Source RGD Symbol Acc 2926
D03	UPFR1097241	ENSRNOT00000 006961.7	Itgav	ENSRNOG00 000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D04	UPFR1091655	ENSRNOT00000 014785.5	Itgb1	ENSRNOG00 000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D05	UPFR1102181	ENSRNOT00000 067780.3	Junb	ENSRNOG00 000042838	JunB proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2944
D06	UPFR1041145	ENSRNOT00000 085089.1	Kdr	ENSRNOG00 000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
D07	UPFR1087511	ENSRNOT00000 085097.1	Kitlg	ENSRNOG00 000005386	KIT ligand Source RGD Symbol Acc 3086
D08	UPFR1053192	ENSRNOT00000 013933.6	Map2k1	ENSRNOG00 000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
D09	UPFR1036984	ENSRNOT00000 000617.8	Mapk14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D10	UPFR1126542	ENSRNOT00000 008608.4	LOC10369 4877	ENSRNOG00 000006589	macrophage migration inhibitory factor Source RGD Symbol Acc 621163
D11	UPFR1101595	ENSRNOT00000 012595.3	Mmp1	ENSRNOG00 000032353	matrix metalloproteinase 1 Source RGD Symbol Acc 1307917
D12	UPFR1080151	ENSRNOT00000 022679.6	Mmp2	ENSRNOG00 000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E01	UPFR1024113	ENSRNOT00000 057745.3	Nab2	ENSRNOG00 000008415	Ngfi-A binding protein 2 Source RGD Symbol Acc 1311712
E02	UPFR1116688	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E03	UPFR1086234	ENSRNOT00000 010171.4	Nr4a1	ENSRNOG00 000007607	nuclear receptor subfamily 4, group A, member 1 Source RGD Symbol Acc 620029
E04	UPFR1088915	ENSRNOT00000 014273.5	Plau	ENSRNOG00 000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
E05	UPFR1041940	ENSRNOT00000 075167.3	Plaur	ENSRNOG00 000037931	plasminogen activator, urokinase receptor Source RGD Symbol Acc 620597
E06	UPFR1098667	ENSRNOT00000 007044.5	Plek	ENSRNOG00 000005214	pleckstrin Source RGD Symbol Acc 1308269
E07	UPFR1070729	ENSRNOT00000 023368.5	Plg	ENSRNOG00 000017223	plasminogen Source RGD Symbol Acc 619893
E08	UPFR1034906	ENSRNOT00000 004699.8	Prkca	ENSRNOG00 000003491	protein kinase C, alpha Source RGD Symbol Acc 3395
E09	UPFR1107353	ENSRNOT00000 020959.7	Prkce	ENSRNOG00 000015603	protein kinase C, epsilon Source RGD Symbol Acc 61925
E10	UPFR1113457	ENSRNOT00000 019596.4	Proc	ENSRNOG00 000014376	protein C, inactivator of coagulation factors Va and VIIIa Source RGD Symbol Acc 3411
E11	UPFR1020319	ENSRNOT00000 055254.4	Procr	ENSRNOG00 000019330	protein C receptor Source RGD Symbol Acc 1305991
E12	UPFR1035449	ENSRNOT00000 003567.4	Ptgs2	ENSRNOG00 000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F01	UPFR1115915	ENSRNOT00000 011219.6	Ptk2	ENSRNOG00 000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
F02	UPFR1116105	ENSRNOT00000 046323.5	Ptpn11	ENSRNOG00 000030124	protein tyrosine phosphatase, non-receptor type 11 Source RGD Symbol Acc 3447
F03	UPFR1066569	ENSRNOT00000 081077.1	Rel	ENSRNOG00 000054437	REL proto-oncogene, NF-kB subunit Source RGD Symbol Acc 1311231
F04	UPFR1070877	ENSRNOT00000 045233.3	Rela	ENSRNOG00 000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
F05	UPFR1119707	ENSRNOT00000 071664.2	Rhoa	ENSRNOG00 000050519	ras homolog family member A Source RGD Symbol Acc 619921
F06	UPFR1126536	ENSRNOT00000 003425.4	Rhoh	ENSRNOG00 000002540	ras homolog family member H Source RGD Symbol Acc 1307623
F07	UPFR1107808	ENSRNOT00000 005226.4	Rps6kb1	ENSRNOG00 000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683
F08	UPFR1049908	ENSRNOT00000 018318.3	S1pr1	ENSRNOG00 000013683	sphingosine-1-phosphate receptor 1 Source RGD Symbol Acc 61958
F09	UPFR1107844	ENSRNOT00000 019473.3	S1pr3	ENSRNOG00 000014524	sphingosine-1-phosphate receptor 3 Source RGD Symbol Acc 1583843
F10	UPFR1029154	ENSRNOT00000 030677.3	Sele	ENSRNOG00 000002723	selectin E Source RGD Symbol Acc 3654

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1033299	ENSRNOT00000076879.2	Selp	ENSRNOG0000002794	selectin P Source RGD Symbol Acc 3656
F12	UPFR1020681	ENSRNOT00000003409.5	Serpib2	ENSRNOG0000002460	serpin family B member 2 Source RGD Symbol Acc 621823
G01	UPFR1103490	ENSRNOT00000003625.7	Serpib5	ENSRNOG0000002640	serpin family B member 5 Source RGD Symbol Acc 69342
G02	UPFR1051798	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
G03	UPFR1050158	ENSRNOT00000012739.4	Src	ENSRNOG0000009495	SRC proto-oncogene, non-receptor tyrosine kinase Source RGD Symbol Acc 620795
G04	UPFR1049469	ENSRNOT00000006787.7	Tfpi	ENSRNOG0000005039	tissue factor pathway inhibitor Source RGD Symbol Acc 61914
G05	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G06	UPFR1103035	ENSRNOT00000006200.3	Thbd	ENSRNOG0000004687	thrombomodulin Source RGD Symbol Acc 621299
G07	UPFR1104745	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G08	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G09	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G10	UPFR1101375	ENSRNOT00000019377.5	Vcam1	ENSRNOG0000014333	vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952
G11	UPFR1117908	ENSRNOT00000026559.5	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G12	UPFR1108264	ENSRNOT00000015529.4	Vegfc	ENSRNOG0000011416	vascular endothelial growth factor C Source RGD Symbol Acc 619800
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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