

# QuantiNova® LNA® Probe PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

## Rat Pain: Neuropathic & Inflammatory

Cat. no. 249955 UPRN-162ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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
<b>A</b>	Ace	Adora1	Adrb2	Alox5	Bdkrb1	Bdnf	Cocna1b	Calca	Cck	Cckbr	Ccl12	Ccl2
<b>B</b>	Cd200	Cd4	Chrna4	Cnr1	Cnr2	Comt	Csf1	Cx3cr1	Dbh	Edn1	Ednra	Faah
<b>C</b>	Gch1	Gdnf	Grin1	Grin2b	Grm1	Grm5	Htr1a	Htr2a	Il10	Il18	Il1a	Il1b
<b>D</b>	Il2	Il6	Itgad	Itgb2	Kcnp3	Kcnj6	Kcnq2	Kcnq3	Maob	Mapk1	Mapk14	Mapk3
<b>E</b>	Mapk8	Ngf	Ntrk1	Oprd1	Oprk1	Oprm1	P2rx3	P2rx4	P2rx7	P2ry1	Pdyn	Penk
<b>F</b>	Pla2g1b	Pnoc	Prok2	Ptger1	Ptger3	Ptger4	Ptges	Ptges2	Ptges3	Ptgs1	Ptgs2	Scn10a
<b>G</b>	Scn11a	Scn3a	Scn9a	Slc6a2	Tac1	Tacr1	Tlr2	Tlr4	LOC1036943 80	Trpa1	Trpv1	Trpv3
<b>H</b>	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	UPFR1115385	ENSRNOT00000010627.8	Ace	ENSRNOG0000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A02	UPFR1120851	ENSRNOT00000078993.1	Adora1	ENSRNOG0000003442	adenosine A1 receptor Source RGD Symbol Acc 2048
A03	UPFR1035973	ENSRNOT00000026098.3	Adrb2	ENSRNOG0000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A04	UPFR1115697	ENSRNOT00000017633.5	Alox5	ENSRNOG0000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
A05	UPFR1119007	ENSRNOT00000005953.3	Bdkrb1	ENSRNOG0000004488	bradykinin receptor B1 Source RGD Symbol Acc 620401
A06	UPFR1014257	ENSRNOT00000078543.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A07	UPFR1068111	ENSRNOT00000048945.4	Cacna1b	ENSRNOG0000004560	calcium voltage-gated channel subunit alpha1 B Source RGD Symbol Acc 628852
A08	UPFR1035100	ENSRNOT00000055124.4	Calca	ENSRNOG0000011130	calcitonin-related polypeptide alpha Source RGD Symbol Acc 2254
A09	UPFR1013266	ENSRNOT00000026159.3	Cck	ENSRNOG0000019321	cholecystokinin Source RGD Symbol Acc 2288
A10	UPFR1062077	ENSRNOT00000024077.3	Cckbr	ENSRNOG0000017679	cholecystokinin B receptor Source RGD Symbol Acc 2290
A11	UPFR1080637	ENSRNOT00000031626.5	Ccl12	ENSRNOG0000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
A12	UPFR1014050	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B01	UPFR1061781	ENSRNOT00000093295.1	Cd200	ENSRNOG0000002141	Cd200 molecule Source RGD Symbol Acc 3104
B02	UPFR1096622	ENSRNOT00000021915.2	Cd4	ENSRNOG0000016294	Cd4 molecule Source RGD Symbol Acc 2306
B03	UPFR1104964	ENSRNOT00000009041.7	Chrna4	ENSRNOG0000011202	cholinergic receptor nicotinic alpha 4 subunit Source RGD Symbol Acc 2346
B04	UPFR1028958	ENSRNOT00000010850.2	Cnr1	ENSRNOG0000008223	cannabinoid receptor 1 Source RGD Symbol Acc 2369
B05	UPFR1015078	ENSRNOT00000074998.2	Cnr2	ENSRNOG0000009260	cannabinoid receptor 2 Source RGD Symbol Acc 619713
B06	UPFR1106463	ENSRNOT00000050269.5	Comt	ENSRNOG000001889	catechol-O-methyltransferase Source RGD Symbol Acc 2379
B07	UPFR1022984	ENSRNOT00000081835.1	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B08	UPFR1042789	ENSRNOT00000025019.2	Cx3cr1	ENSRNOG0000018509	C-X3-C motif chemokine receptor 1 Source RGD Symbol Acc 620137
B09	UPFR1111093	ENSRNOT00000070887.2	Dbh	ENSRNOG0000006641	dopamine beta-hydroxylase Source RGD Symbol Acc 2489
B10	UPFR1035851	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
B11	UPFR1093550	ENSRNOT00000078701.1	Ednra	ENSRNOG0000012721	endothelin receptor type A Source RGD Symbol Acc 2535
B12	UPFR1113285	ENSRNOT00000015961.6	Faah	ENSRNOG0000011019	fatty acid amide hydrolase Source RGD Symbol Acc 61808
C01	UPFR1090945	ENSRNOT00000014821.7	Gch1	ENSRNOG0000011039	GTP cyclohydrolase 1 Source RGD Symbol Acc 61992
C02	UPFR1111724	ENSRNOT00000041288.2	Gdnf	ENSRNOG0000012819	glial cell derived neurotrophic factor Source RGD Symbol Acc 2677
C03	UPFR1041053	ENSRNOT00000049297.3	Grin1	ENSRNOG0000011726	glutamate ionotropic receptor NMDA type subunit 1 Source RGD Symbol Acc 2736
C04	UPFR1071315	ENSRNOT000000111697.4	Grin2b	ENSRNOG0000008766	glutamate ionotropic receptor NMDA type subunit 2B Source RGD Symbol Acc 2738
C05	UPFR1030956	ENSRNOT00000044325.3	Grm1	ENSRNOG0000014290	glutamate metabotropic receptor 1 Source RGD Symbol Acc 2742
C06	UPFR1073288	ENSRNOT00000050639.2	Grm5	ENSRNOG0000016429	glutamate metabotropic receptor 5 Source RGD Symbol Acc 2746
C07	UPFR1088882	ENSRNOT00000013618.2	Htr1a	ENSRNOG0000010254	5-hydroxytryptamine receptor 1A Source RGD Symbol Acc 2845
C08	UPFR1042475	ENSRNOT00000013408.6	Htr2a	ENSRNOG0000010063	5-hydroxytryptamine receptor 2A Source RGD Symbol Acc 61800
C09	UPFR1113235	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
C10	UPFR1053861	ENSRNOT00000013093.6	Il18	ENSRNOG0000009848	interleukin 18 Source RGD Symbol Acc 2889
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1066959	080818.1	Il1a	000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
C12	UPFR1121351	ENSRNOT0000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D01	UPFR1070791	ENSRNOT00000023327.2	Il2	ENSRNOG00000017348	interleukin 2 Source RGD Symbol Acc 620047
D02	UPFR1098910	ENSRNOT00000013732.6	Il6	ENSRNOG00000010278	interleukin 6 Source RGD Symbol Acc 2901
D03	UPFR1089159	ENSRNOT00000026748.4	Itgad	ENSRNOG00000019728	integrin subunit alpha M Source RGD Symbol Acc 2926
D04	UPFR1033837	ENSRNOT00000001639.6	Itgb2	ENSRNOG0000001224	integrin subunit beta 2 Source RGD Symbol Acc 1305581
D05	UPFR1031131	ENSRNOT00000047158.4	Kcnip3	ENSRNOG00000014152	potassium voltage-gated channel interacting protein 3 Source RGD Symbol Acc 70888
D06	UPFR1047292	ENSRNOT00000079955.1	Kcnj6	ENSRNOG0000001658	potassium voltage-gated channel subfamily J member 6 Source RGD Symbol Acc 2959
D07	UPFR1016811	ENSRNOT00000049961.4	Kcnq2	ENSRNOG00000011624	potassium voltage-gated channel subfamily Q member 2 Source RGD Symbol Acc 621504
D08	UPFR1118106	ENSRNOT00000074573.2	Kcnq3	ENSRNOG0000005206	potassium voltage-gated channel subfamily Q member 3 Source RGD Symbol Acc 69222
D09	UPFR1081997	ENSRNOT00000044009.5	Maob	ENSRNOG00000029778	monoamine oxidase B Source RGD Symbol Acc 3041
D10	UPFR1055882	ENSRNOT00000002533.7	Mapk1	ENSRNOG0000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D11	UPFR1036984	ENSRNOT00000000617.8	Mapk14	ENSRNOG0000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D12	UPFR1049954	ENSRNOT00000087625.1	Mapk3	ENSRNOG00000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
E01	UPFR1048766	ENSRNOT00000065216.3	Mapk8	ENSRNOG00000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E02	UPFR1044499	ENSRNOT00000022200.6	Ngf	ENSRNOG00000016571	nerve growth factor Source RGD Symbol Acc 1598328
E03	UPFR1096767	ENSRNOT00000018961.3	Ntrk1	ENSRNOG00000013953	neurotrophic receptor tyrosine kinase 1 Source RGD Symbol Acc 620144
E04	UPFR1034601	ENSRNOT00000014084.3	Oprd1	ENSRNOG00000010531	opioid receptor, delta 1 Source RGD Symbol Acc 3233
E05	UPFR1047533	ENSRNOT00000010254.3	Oprk1	ENSRNOG00000007647	opioid receptor, kappa 1 Source RGD Symbol Acc 69426
E06	UPFR1097686	ENSRNOT00000092034.1	Oprm1	ENSRNOG00000018191	opioid receptor, mu 1 Source RGD Symbol Acc 3234
E07	UPFR1077907	ENSRNOT00000077573.1	P2rx3	ENSRNOG0000008552	purinergic receptor P2X 3 Source RGD Symbol Acc 620253
E08	UPFR1033693	ENSRNOT00000001752.5	P2rx4	ENSRNOG0000001300	purinergic receptor P2X 4 Source RGD Symbol Acc 62073
E09	UPFR1059236	ENSRNOT00000079201.1	P2rx7	ENSRNOG0000001296	purinergic receptor P2X 7 Source RGD Symbol Acc 3241
E10	UPFR1017368	ENSRNOT00000019305.4	P2ry1	ENSRNOG00000014232	purinergic receptor P2Y1 Source RGD Symbol Acc 3242
E11	UPFR1018344	ENSRNOT00000037576.3	Pdyn	ENSRNOG00000026036	prodynorphin Source RGD Symbol Acc 62054
E12	UPFR1053232	ENSRNOT00000089318.1	Penk	ENSRNOG0000008943	proenkephalin Source RGD Symbol Acc 68946
F01	UPFR1117063	ENSRNOT00000001525.3	Pla2g1b	ENSRNOG0000001153	phospholipase A2 group IB Source RGD Symbol Acc 61949
F02	UPFR1013018	ENSRNOT00000019117.7	Pnoc	ENSRNOG00000014231	prepronociceptin Source RGD Symbol Acc 3362
F03	UPFR1092708	ENSRNOT00000015075.2	Prok2	ENSRNOG00000010898	prokineticin 2 Source RGD Symbol Acc 620280
F04	UPFR1018376	ENSRNOT00000005470.4	Ptger1	ENSRNOG0000004094	prostaglandin E receptor 1 Source RGD Symbol Acc 3434
F05	UPFR1026935	ENSRNOT00000014126.5	Ptger3	ENSRNOG00000010325	prostaglandin E receptor 3 Source RGD Symbol Acc 3435
F06	UPFR1039427	ENSRNOT00000017886.5	Ptger4	ENSRNOG00000013240	prostaglandin E receptor 4 Source RGD Symbol Acc 628641
F07	UPFR1080395	ENSRNOT00000045993.2	Ptges	ENSRNOG0000006320	prostaglandin E synthase Source RGD Symbol Acc 62076
F08	UPFR1071457	ENSRNOT00000019184.6	Ptges2	ENSRNOG00000014050	prostaglandin E synthase 2 Source RGD Symbol Acc 1310836
F09	UPFR1071321	ENSRNOT00000003787.7	Ptges3	ENSRNOG0000002642	prostaglandin E synthase 3 Source RGD Symbol Acc 1561913
F10	UPFR1053064	ENSRNOT00000010218.5	Ptgs1	ENSRNOG0000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1035449	ENSRNOT00000003567.4	Ptgs2	ENSRNOG0000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F12	UPFR1046092	ENSRNOT00000046864.4	Scn10a	ENSRNOG0000032473	sodium voltage-gated channel alpha subunit 10 Source RGD Symbol Acc 3629
G01	UPFR1032503	ENSRNOT00000034025.3	Scn11a	ENSRNOG0000032884	sodium voltage-gated channel alpha subunit 11 Source RGD Symbol Acc 3630
G02	UPFR1056784	ENSRNOT00000081401.1	Scn3a	ENSRNOG0000005007	sodium voltage-gated channel alpha subunit 3 Source RGD Symbol Acc 3635
G03	UPFR1088490	ENSRNOT00000065126.3	Scn9a	ENSRNOG0000006639	sodium voltage-gated channel alpha subunit 9 Source RGD Symbol Acc 69368
G04	UPFR1088807	ENSRNOT00000048470.2	Slc6a2	ENSRNOG0000016311	solute carrier family 6 member 2 Source RGD Symbol Acc 621822
G05	UPFR1086792	ENSRNOT00000034719.4	Tac1	ENSRNOG0000007374	tachykinin, precursor 1 Source RGD Symbol Acc 3807
G06	UPFR1122055	ENSRNOT00000007984.5	Tacr1	ENSRNOG0000005853	tachykinin receptor 1 Source RGD Symbol Acc 3811
G07	UPFR1061984	ENSRNOT00000013025.4	Tlr2	ENSRNOG0000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
G08	UPFR1020675	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G09	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG000005156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G10	UPFR1099576	ENSRNOT00000009874.2	Trpa1	ENSRNOG0000007354	transient receptor potential cation channel, subfamily A, member 1 Source RGD Symbol Acc 1303284
G11	UPFR1064996	ENSRNOT00000026493.6	Trpv1	ENSRNOG0000019486	transient receptor potential cation channel, subfamily V, member 1 Source RGD Symbol Acc 628841
G12	UPFR1067438	ENSRNOT00000026596.3	Trpv3	ENSRNOG0000019606	transient receptor potential cation channel, subfamily V, member 3 Source RGD Symbol Acc 1564531
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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