

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

## Rat Common Cytokines

Cat. no. 249955 UPRN-021ZR

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
<b>A</b>	Adipoq	Aimp1	Areg	Bmp1	Bmp2	Bmp3	Bmp4	Bmp5	Bmp6	Bmp7	C5	Cd40lg
<b>B</b>	Cd70	Cnif	Csf1	Csf2	Csf3	Cfhl	Foslg	Fgf10	Gdf15	Gdf5	Gdf9	Grem1
<b>C</b>	Ifna5	Ifna2	Ifna4	Ifnb1	Ifng	Il10	Il11	Il12a	Il12b	Il13	Il15	Il16
<b>D</b>	Il17a	Il17b	Il17f	Il18	Il1a	Il1b	Il1rn	Il2	Il20	Il21	Il22	Il23a
<b>E</b>	Il24	Il27	Il3	Il33	Il4	Il5	Il6	Il7	Il9	Inha	Inhba	Lif
<b>F</b>	Lta	LOC1036943 81	LOC1036948 77	Mstn	Nampt	Nodal	Nrg1	Osm	Scgb3a1	Spp1	Tgfb1	Tgfb2
<b>G</b>	Thpo1	LOC1036943 80	Tnfrsf11b	Tnfrsf10	LOC1036899 74	Tnfrsf12	Tnfrsf13	Tnfrsf15	Tnfrsf18	Tnfrsf4	Tnfrsf9	Vegfa
<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	UPFR1094195	ENSRNOT00000089988.1	Adipoq	ENSRNOG0000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A02	UPFR1022885	ENSRNOT00000015213.6	Aimp1	ENSRNOG0000011384	aminoacyl tRNA synthetase complex-interacting multifunctional protein 1 Source RGD Symbol Acc 620466
A03	UPFR1060559	ENSRNOT00000003703.4	Areg	ENSRNOG0000002754	amphiregulin Source RGD Symbol Acc 2149
A04	UPFR1057170	ENSRNOT00000046054.4	Bmp1	ENSRNOG0000010890	bone morphogenetic protein 1 Source RGD Symbol Acc 620739
A05	UPFR1023820	ENSRNOT00000028904.4	Bmp2	ENSRNOG0000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
A06	UPFR1067060	ENSRNOT00000038872.3	Bmp3	ENSRNOG0000002381	bone morphogenetic protein 3 Source RGD Symbol Acc 2212
A07	UPFR1013450	ENSRNOT00000083268.1	Bmp4	ENSRNOG0000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A08	UPFR1079381	ENSRNOT00000014846.5	Bmp5	ENSRNOG0000010917	bone morphogenetic protein 5 Source RGD Symbol Acc 1305979
A09	UPFR1048825	ENSRNOT00000018359.7	Bmp6	ENSRNOG0000013717	bone morphogenetic protein 6 Source RGD Symbol Acc 2214
A10	UPFR1105126	ENSRNOT00000084990.1	Bmp7	ENSRNOG0000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A11	UPFR1034130	ENSRNOT00000025534.7	C5	ENSRNOG0000018899	complement C5 Source RGD Symbol Acc 2237
A12	UPFR1038741	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
B01	UPFR1090606	ENSRNOT00000070806.1	Cd70	ENSRNOG0000051015	Cd70 molecule Source RGD Symbol Acc 1588573
B02	UPFR1111031	ENSRNOT00000016690.2	Cnff	ENSRNOG0000012460	ciliary neurotrophic factor Source RGD Symbol Acc 2370
B03	UPFR1022984	ENSRNOT00000081835.1	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B04	UPFR1084630	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B05	UPFR1037448	ENSRNOT00000011509.3	Csf3	ENSRNOG0000008525	colony stimulating factor 3 Source RGD Symbol Acc 2426
B06	UPFR1081638	ENSRNOT00000025646.2	Ctfr	ENSRNOG0000018962	cardiotrophin 1 Source RGD Symbol Acc 2442
B07	UPFR1108356	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
B08	UPFR1048435	ENSRNOT00000016485.3	Fgf10	ENSRNOG0000012278	fibroblast growth factor 10 Source RGD Symbol Acc 2606
B09	UPFR1099357	ENSRNOT00000026652.3	Gdf15	ENSRNOG0000019661	growth differentiation factor 15 Source RGD Symbol Acc 2674
B10	UPFR1064525	ENSRNOT00000073736.3	Gdf5	ENSRNOG0000050123	growth differentiation factor 5 Source RGD Symbol Acc 620102
B11	UPFR1091836	ENSRNOT00000009727.2	Gdf9	ENSRNOG0000007301	growth differentiation factor 9 Source RGD Symbol Acc 71038
B12	UPFR1094825	ENSRNOT00000037895.3	Grem1	ENSRNOG0000026053	gremlin 1, DAN family BMP antagonist Source RGD Symbol Acc 2359
C01	UPFR1014391	ENSRNOT00000049705.1	Ifna5	ENSRNOG0000031046	interferon, alpha 5 Source RGD Symbol Acc 1359312
C02	UPFR1086334	ENSRNOT00000045433.4	Ifna2	ENSRNOG0000058365	interferon alpha 2 Source RGD Symbol Acc 1311425
C03	UPFR1115006	ENSRNOT00000046207.3	Ifna4	ENSRNOG0000033823	interferon, alpha 4 Source RGD Symbol Acc 1306334
C04	UPFR1098156	ENSRNOT00000008224.2	Ifnb1	ENSRNOG0000006268	interferon beta 1 Source RGD Symbol Acc 2865
C05	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
C06	UPFR1113235	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
C07	UPFR1065504	ENSRNOT00000023489.5	Il11	ENSRNOG0000017386	interleukin 11 Source RGD Symbol Acc 621475
C08	UPFR1065603	ENSRNOT00000012831.3	Il12a	ENSRNOG0000009468	interleukin 12A Source RGD Symbol Acc 620562
C09	UPFR1060283	ENSRNOT00000005898.6	Il12b	ENSRNOG0000004380	interleukin 12B Source RGD Symbol Acc 628704
C10	UPFR1038252	ENSRNOT00000010121.2	Il13	ENSRNOG0000007652	interleukin 13 Source RGD Symbol Acc 68949
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1102147	004590.6	Il15	000003439	interleukin 15 Source RGD Symbol Acc 2887
C12	UPFR1122227	ENSRNOT0000016289.4	Il16	ENSRNOG0000011680	interleukin 16 Source RGD Symbol Acc 1583872
D01	UPFR1062668	ENSRNOT0000016664.4	Il17a	ENSRNOG0000012467	interleukin 17A Source RGD Symbol Acc 2888
D02	UPFR1119999	ENSRNOT0000026679.6	Il17b	ENSRNOG0000019695	interleukin 17B Source RGD Symbol Acc 620614
D03	UPFR1042305	ENSRNOT0000016717.5	Il17f	ENSRNOG0000012509	interleukin 17F Source RGD Symbol Acc 1311398
D04	UPFR1053861	ENSRNOT0000013093.6	Il18	ENSRNOG0000009848	interleukin 18 Source RGD Symbol Acc 2889
D05	UPFR1066959	ENSRNOT0000080818.1	Il1a	ENSRNOG0000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
D06	UPFR1121351	ENSRNOT0000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D07	UPFR1086251	ENSRNOT0000007949.6	Il1rn	ENSRNOG0000005871	interleukin 1 receptor antagonist Source RGD Symbol Acc 621159
D08	UPFR1070791	ENSRNOT0000023327.2	Il2	ENSRNOG0000017348	interleukin 2 Source RGD Symbol Acc 620047
D09	UPFR1057089	ENSRNOT0000067006.2	Il20	ENSRNOG0000004633	interleukin 20 Source RGD Symbol Acc 1583578
D10	UPFR1051958	ENSRNOT0000023348.4	Il21	ENSRNOG0000017376	interleukin 21 Source RGD Symbol Acc 1307384
D11	UPFR1058955	ENSRNOT0000009776.4	Il22	ENSRNOG0000007365	interleukin 22 Source RGD Symbol Acc 1561292
D12	UPFR1075411	ENSRNOT0000004363.3	Il23a	ENSRNOG0000003254	interleukin 23 subunit alpha Source RGD Symbol Acc 620873
E01	UPFR1023656	ENSRNOT0000006106.3	Il24	ENSRNOG0000004470	interleukin 24 Source RGD Symbol Acc 621484
E02	UPFR1104994	ENSRNOT0000025950.5	Il27	ENSRNOG0000019170	interleukin 27 Source RGD Symbol Acc 1561420
E03	UPFR1073307	ENSRNOT0000031762.1	Il3	ENSRNOG0000026786	interleukin 3 Source RGD Symbol Acc 2897
E04	UPFR1088661	ENSRNOT0000022056.7	Il33	ENSRNOG0000016456	interleukin 33 Source RGD Symbol Acc 1311155
E05	UPFR1099283	ENSRNOT0000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
E06	UPFR1086524	ENSRNOT0000010729.4	Il5	ENSRNOG0000008111	interleukin 5 Source RGD Symbol Acc 2900
E07	UPFR1098910	ENSRNOT0000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E08	UPFR1101991	ENSRNOT0000016091.7	Il7	ENSRNOG0000011973	interleukin 7 Source RGD Symbol Acc 2904
E09	UPFR1021636	ENSRNOT0000016187.2	Il9	ENSRNOG0000012131	interleukin 9 Source RGD Symbol Acc 620049
E10	UPFR1056586	ENSRNOT0000027227.4	Inha	ENSRNOG0000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
E11	UPFR1022215	ENSRNOT0000019272.5	Inhba	ENSRNOG0000014320	inhibin subunit beta A Source RGD Symbol Acc 62074
E12	UPFR1017798	ENSRNOT0000009313.4	Lif	ENSRNOG0000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
F01	UPFR1116910	ENSRNOT0000088936.1	Lta	ENSRNOG0000000838	lymphotoxin alpha Source RGD Symbol Acc 3020
F02	UPFR1050435	ENSRNOT0000089411.1	LOC103694381	ENSRNOG0000058566	lymphotoxin-beta Source RGD Symbol Acc 9083628
F03	UPFR1126542	ENSRNOT0000008608.4	LOC103694877	ENSRNOG0000006589	macrophage migration inhibitory factor Source RGD Symbol Acc 621163
F04	UPFR1114916	ENSRNOT0000038093.3	Mstn	ENSRNOG0000021294	myostatin Source RGD Symbol Acc 3115
F05	UPFR1037521	ENSRNOT0000013043.6	Nampt	ENSRNOG0000009754	nicotinamide phosphoribosyltransferase Source RGD Symbol Acc 631365
F06	UPFR1057301	ENSRNOT0000000672.4	Nodal	ENSRNOG0000000556	nodal growth differentiation factor Source RGD Symbol Acc 1305994
F07	UPFR1017750	ENSRNOT0000038549.7	Nrg1	ENSRNOG0000010392	neuregulin 1 Source RGD Symbol Acc 621341
F08	UPFR1058346	ENSRNOT0000035591.3	Osm	ENSRNOG0000024390	oncostatin M Source RGD Symbol Acc 1585012
F09	UPFR1014397	ENSRNOT0000051916.3	Scgb3a1	ENSRNOG0000002718	secretoglobin, family 3A, member 1 Source RGD Symbol Acc 727901
F10	UPFR1100110	ENSRNOT0000067875.4	Spp1	ENSRNOG0000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
F12	UPFR1046456	ENSRNOT00000087023.1	Tgfb2	ENSRNOG0000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G01	UPFR1100728	ENSRNOT00000073743.2	Thpol1	ENSRNOG0000050172	thrombopoietin like 1 Source RGD Symbol Acc 11455920
G02	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	UPFR1015258	ENSRNOT00000011344.5	Tnfrsf11b	ENSRNOG0000008336	TNF receptor superfamily member 11B Source RGD Symbol Acc 619802
G04	UPFR1107113	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G05	UPFR1105006	ENSRNOT00000049056.4	LOC103689974	ENSRNOG0000049547	TNF superfamily member 11 Source RGD Symbol Acc 620784
G06	UPFR1096999	ENSRNOT00000064401.2	Tnfsf12	ENSRNOG0000045670	TNF superfamily member 12 Source RGD Symbol Acc 1359620
G07	UPFR1092546	ENSRNOT00000056903.3	Tnfsf13	ENSRNOG0000014171	TNF superfamily member 13 Source RGD Symbol Acc 1305871
G08	UPFR1094917	ENSRNOT00000011845.3	Tnfsf15	ENSRNOG0000008930	TNF superfamily member 15 Source RGD Symbol Acc 628735
G09	UPFR1080447	ENSRNOT00000039221.5	Tnfsf18	ENSRNOG0000026607	TNF superfamily member 18 Source RGD Symbol Acc 1305066
G10	UPFR1107619	ENSRNOT00000003969.5	Tnfsf4	ENSRNOG0000002968	TNF superfamily member 4 Source RGD Symbol Acc 619816
G11	UPFR1097440	ENSRNOT00000071515.1	Tnfsf9	ENSRNOG0000045595	TNF superfamily member 9 Source RGD Symbol Acc 727974
G12	UPFR1117908	ENSRNOT00000026559.5	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
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.

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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

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