

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

Rat Transplant Rejection

Cat. no. 249955 UPRN-166ZA

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 for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adam17	Bmp7	C3	C4a	Casp1	Casp3	Casp8	Ccl11	Ccl2	Ccl3	Ccl4	Ccl5
B	Tnfrsf3	Ccr3	Ccr5	Ccr7	Cd14	Cd28	Cd40	Cd40lg	Cd44	Cd80	Cd86	Cd8a
C	Col1a2	Csf2	Ccn2	Ctla4	Cx3cr1	Cxcl10	Cxcl11	Cxcl9	Cxcr2	Cxcr3	Cxcr4	Fas
D	Faslg	Gzma	Gzmb	Icam1	Ifng	Il10	Il12a	Il12b	Il13	Il16	Il1b	Il2
E	Il2ra	Il3	Il4	Il5	Il6	Ilga2	Ilgae	Ilgad	Mmp1	Mmp1b	Mmp2	Mmp7
F	Mmp9	Ms4a1	Nfkb1	Nos2	Osm	Pf1	Psmb9	Smad3	Stat1	Stat6	Tap1	Tgfb1
G	Tgfb2	Tgfb3	Thbs1	Thbs2	Timp1	Tlr3	Tlr4	Tlr9	LOC1036943 80	Tnfrsf10	Vcam1	Vegfa
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	UPFR1096573	ENSRNOT00000081110.1	Adam17	ENSRNOG0000060694	ADAM metallopeptidase domain 17 Source RGD Symbol Acc 620404
A02	UPFR1105126	ENSRNOT00000084990.1	Bmp7	ENSRNOG0000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A03	UPFR1069924	ENSRNOT00000075494.1	C3	ENSRNOG0000046834	complement C3 Source RGD Symbol Acc 2232
A04	UPFR1033991	ENSRNOT00000072377.2	C4a	ENSRNOG0000047657	complement C4A Source RGD Symbol Acc 620005
A05	UPFR1052168	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
A06	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
A07	UPFR1030636	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
A08	UPFR1034165	ENSRNOT00000009756.5	Ccl11	ENSRNOG0000007335	C-C motif chemokine ligand 11 Source RGD Symbol Acc 3644
A09	UPFR1014050	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
A10	UPFR1057376	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A11	UPFR1110783	ENSRNOT00000015199.3	Ccl4	ENSRNOG0000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
A12	UPFR1019085	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B01	UPFR1026376	ENSRNOT00000074583.1	Tnfaip3	ENSRNOG0000049517	TNF alpha induced protein 3 Source RGD Symbol Acc 1589275
B02	UPFR1051215	ENSRNOT00000008809.4	Ccr3	ENSRNOG0000006736	C-C motif chemokine receptor 3 Source RGD Symbol Acc 620593
B03	UPFR1023768	ENSRNOT00000082774.1	Ccr5	ENSRNOG0000049115	C-C motif chemokine receptor 5 Source RGD Symbol Acc 620596
B04	UPFR1029602	ENSRNOT00000014163.7	Ccr7	ENSRNOG0000010665	C-C motif chemokine receptor 7 Source RGD Symbol Acc 735151
B05	UPFR1097993	ENSRNOT00000023977.6	Cd14	ENSRNOG0000017819	CD14 molecule Source RGD Symbol Acc 620588
B06	UPFR1119965	ENSRNOT00000013701.3	Cd28	ENSRNOG0000010283	Cd28 molecule Source RGD Symbol Acc 2299
B07	UPFR1023025	ENSRNOT00000055148.4	Cd40	ENSRNOG0000018488	CD40 molecule Source RGD Symbol Acc 619830
B08	UPFR1038741	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
B09	UPFR1040363	ENSRNOT00000009073.7	Cd44	ENSRNOG0000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
B10	UPFR1064878	ENSRNOT00000089625.1	Cd80	ENSRNOG0000001527	Cd80 molecule Source RGD Symbol Acc 2314
B11	UPFR1107778	ENSRNOT00000078936.1	Cd86	ENSRNOG0000038835	CD86 molecule Source RGD Symbol Acc 628714
B12	UPFR1094269	ENSRNOT00000009515.4	Cd8a	ENSRNOG0000007178	CD8a molecule Source RGD Symbol Acc 2316
C01	UPFR1109083	ENSRNOT00000089292.1	Col1a2	ENSRNOG0000011292	collagen type I alpha 2 chain Source RGD Symbol Acc 621351
C02	UPFR1084630	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
C03	UPFR1047569	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
C04	UPFR1019516	ENSRNOT00000091237.1	Ctla4	ENSRNOG0000054129	cytotoxic T-lymphocyte-associated protein 4 Source RGD Symbol Acc 61975
C05	UPFR1042789	ENSRNOT00000025019.2	Cx3cr1	ENSRNOG0000018509	C-X3-C motif chemokine receptor 1 Source RGD Symbol Acc 620137
C06	UPFR1049597	ENSRNOT00000003075.7	Cxcl10	ENSRNOG0000022256	C-X-C motif chemokine ligand 10 Source RGD Symbol Acc 620209
C07	UPFR1033909	ENSRNOT00000031667.4	Cxcl11	ENSRNOG0000022298	C-X-C motif chemokine ligand 11 Source RGD Symbol Acc 727827
C08	UPFR1089821	ENSRNOT00000003082.7	Cxcl9	ENSRNOG0000022242	C-X-C motif chemokine ligand 9 Source RGD Symbol Acc 628798
C09	UPFR1078568	ENSRNOT00000019109.2	Cxcr2	ENSRNOG0000014269	C-X-C motif chemokine receptor 2 Source RGD Symbol Acc 2906
C10	UPFR1064685	ENSRNOT00000076210.1	Cxcr3	ENSRNOG0000003305	C-X-C motif chemokine receptor 3 Source RGD Symbol Acc 621528
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1030244	005143.6	Cxcr4	000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
C12	UPFR1075141	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
D01	UPFR1108356	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
D02	UPFR1058600	ENSRNOT00000014134.3	Gzma	ENSRNOG0000010603	granzyme A Source RGD Symbol Acc 628640
D03	UPFR1035899	ENSRNOT00000041430.5	Gzmb	ENSRNOG0000049976	Granzyme B-like 2 Source RGD Symbol Acc 2320097
D04	UPFR1031281	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
D05	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D06	UPFR1113235	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D07	UPFR1065603	ENSRNOT00000012831.3	Il12a	ENSRNOG0000009468	interleukin 12A Source RGD Symbol Acc 620562
D08	UPFR1060283	ENSRNOT00000005898.6	Il12b	ENSRNOG0000004380	interleukin 12B Source RGD Symbol Acc 628704
D09	UPFR1038252	ENSRNOT00000010121.2	Il13	ENSRNOG0000007652	interleukin 13 Source RGD Symbol Acc 68949
D10	UPFR1122227	ENSRNOT00000016289.4	Il16	ENSRNOG0000011680	interleukin 16 Source RGD Symbol Acc 1583872
D11	UPFR1121351	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D12	UPFR1070791	ENSRNOT00000023327.2	Il2	ENSRNOG0000017348	interleukin 2 Source RGD Symbol Acc 620047
E01	UPFR1114337	ENSRNOT00000073144.2	Il2ra	ENSRNOG0000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
E02	UPFR1073307	ENSRNOT00000031762.1	Il3	ENSRNOG0000026786	interleukin 3 Source RGD Symbol Acc 2897
E03	UPFR1099283	ENSRNOT00000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
E04	UPFR1086524	ENSRNOT00000010729.4	Il5	ENSRNOG0000008111	interleukin 5 Source RGD Symbol Acc 2900
E05	UPFR1098910	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E06	UPFR1068108	ENSRNOT00000077401.1	Itga2	ENSRNOG0000058111	integrin subunit alpha 2 Source RGD Symbol Acc 621632
E07	UPFR1017470	ENSRNOT00000077107.1	Itgae	ENSRNOG0000046639	integrin subunit alpha E Source RGD Symbol Acc 621644
E08	UPFR1089159	ENSRNOT00000026748.4	Itgad	ENSRNOG0000019728	integrin subunit alpha M Source RGD Symbol Acc 2926
E09	UPFR1101595	ENSRNOT00000012595.3	Mmp1	ENSRNOG0000032353	matrix metalloproteinase 1 Source RGD Symbol Acc 1307917
E10	UPFR1043823	ENSRNOT00000011884.5	Mmp1b	ENSRNOG0000008881	matrix metalloproteinase 1b (interstitial collagenase) Source RGD Symbol Acc 1306843
E11	UPFR1080151	ENSRNOT00000022679.6	Mmp2	ENSRNOG0000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E12	UPFR1034539	ENSRNOT00000014041.5	Mmp7	ENSRNOG0000010507	matrix metalloproteinase 7 Source RGD Symbol Acc 3100
F01	UPFR1032957	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
F02	UPFR1013781	ENSRNOT00000028433.7	Ms4a1	ENSRNOG0000020945	membrane spanning 4-domains A1 Source RGD Symbol Acc 1311999
F03	UPFR1116688	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
F04	UPFR1092405	ENSRNOT00000016133.6	Nos2	ENSRNOG0000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
F05	UPFR1058346	ENSRNOT00000035591.3	Osm	ENSRNOG0000024390	oncostatin M Source RGD Symbol Acc 1585012
F06	UPFR1038354	ENSRNOT00000000681.6	Prf1	ENSRNOG0000000562	perforin 1 Source RGD Symbol Acc 708463
F07	UPFR1101179	ENSRNOT00000000532.7	Psmb9	ENSRNOG0000000459	proteasome subunit beta 9 Source RGD Symbol Acc 3427
F08	UPFR1033812	ENSRNOT00000039730.4	Smad3	ENSRNOG0000008620	SMAD family member 3 Source RGD Symbol Acc 3032
F09	UPFR1068760	ENSRNOT00000083514.1	Stat1	ENSRNOG0000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
F10	UPFR1082210	ENSRNOT00000085350.1	Stat6	ENSRNOG0000025023	signal transducer and activator of transcription 6 Source RGD Symbol Acc 1309063

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1038592	ENSRNOT0000000529.6	Tap1	ENSRNOG0000000457	transporter 1, ATP binding cassette subfamily B member Source RGD Symbol Acc 3817
F12	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G01	UPFR1046456	ENSRNOT00000087023.1	Tgfb2	ENSRNOG0000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G02	UPFR1030751	ENSRNOT00000013516.5	Tgfb3	ENSRNOG0000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G03	UPFR1104745	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G04	UPFR1102771	ENSRNOT00000014552.7	Thbs2	ENSRNOG0000010529	thrombospondin 2 Source RGD Symbol Acc 1310979
G05	UPFR1060230	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G06	UPFR1036867	ENSRNOT00000087986.1	Tlr3	ENSRNOG0000021726	toll-like receptor 3 Source RGD Symbol Acc 735171
G07	UPFR1020675	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G08	UPFR1099903	ENSRNOT00000074194.1	Tlr9	ENSRNOG0000048161	toll-like receptor 9 Source RGD Symbol Acc 631352
G09	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G10	UPFR1107113	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G11	UPFR1101375	ENSRNOT00000019377.5	Vcam1	ENSRNOG0000014333	vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952
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 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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