

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

Rat T-Cell & B-Cell Activation

Cat. no. 249955 UPRN-053ZR

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	Ada	Apc	Bad	Bcl2	Casp3	Cblb	Cd3	Cd4	Ccrnd3	Ccr3	Ccr4	Cd1d1
B	Cd2	Cd276	Cd28	Cd38	Cd3d	Cd3e	Cd3g	Cd4	Cd40	Cd40lg	Cd47	Cd48
C	Cd74	Cd79al	Cd81	Cd8a	Cd8b	Cdkn1a	Cr2	Csf2	Ctla4	Cxcl12	Cxcr4	Cxcr5
D	Dpp4	Egr1	Flk3	Foxp3	Hsp90aa1	Icam1	Ifng	Il10	Il11	Il12b	Il15	Il18
E	Il18r1	Il1b	Il2	Il27	Il2ra	Il4	Il6	Il7	Inha	Ir4	Jag2	Lck
F	LOC1009107 71	Ms4a1	Nck1	Nos2	AABR0703175 6.1	Pax1	Pdcd1lg2	Pik3r1	Prkcd	Prkcaq	Prlr	Ptprc
G	Rag1	Socs1	Spp1	Tgfb1	Tlr1	Tlr4	Tlr6	Tnfrsf14	Tp53	Traf6	Vav1	Was
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	UPFR1044757	ENSRNOT00000014151.6	Ada	ENSRNOG0000010265	adenosine deaminase Source RGD Symbol Acc 2031
A02	UPFR1090312	ENSRNOT00000090264.1	Apc	ENSRNOG0000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A03	UPFR1109796	ENSRNOT00000028712.5	Bad	ENSRNOG0000021147	BCL2-associated agonist of cell death Source RGD Symbol Acc 620103
A04	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A05	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
A06	UPFR1107987	ENSRNOT00000077220.1	Cblb	ENSRNOG000001982	Cbl proto-oncogene B Source RGD Symbol Acc 620535
A07	UPFR1057376	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A08	UPFR1110783	ENSRNOT00000015199.3	Ccl4	ENSRNOG0000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
A09	UPFR1115909	ENSRNOT00000074217.1	Ccnd3	ENSRNOG0000050258	cyclin D3 Source RGD Symbol Acc 2293
A10	UPFR1051215	ENSRNOT00000008809.4	Ccr3	ENSRNOG0000006736	C-C motif chemokine receptor 3 Source RGD Symbol Acc 620593
A11	UPFR1083127	ENSRNOT00000013705.3	Ccr4	ENSRNOG0000010315	C-C motif chemokine receptor 4 Source RGD Symbol Acc 620594
A12	UPFR1058282	ENSRNOT00000022150.2	Cd1d1	ENSRNOG0000016451	CD1d1 molecule Source RGD Symbol Acc 2296
B01	UPFR1122328	ENSRNOT00000021268.7	Cd2	ENSRNOG0000015821	Cd2 molecule Source RGD Symbol Acc 2297
B02	UPFR1062780	ENSRNOT00000042681.4	Cd276	ENSRNOG0000033608	Cd276 molecule Source RGD Symbol Acc 727815
B03	UPFR1119965	ENSRNOT00000013701.3	Cd28	ENSRNOG0000010283	Cd28 molecule Source RGD Symbol Acc 2299
B04	UPFR1085134	ENSRNOT00000004121.4	Cd38	ENSRNOG0000003069	CD38 molecule Source RGD Symbol Acc 2303
B05	UPFR1075543	ENSRNOT00000021488.5	Cd3d	ENSRNOG0000015994	CD3d molecule Source RGD Symbol Acc 2304
B06	UPFR1060410	ENSRNOT00000047291.4	Cd3e	ENSRNOG0000016069	CD3e molecule Source RGD Symbol Acc 1309222
B07	UPFR1107984	ENSRNOT00000021390.6	Cd3g	ENSRNOG0000015945	CD3g molecule Source RGD Symbol Acc 1307718
B08	UPFR1096622	ENSRNOT00000021915.2	Cd4	ENSRNOG0000016294	Cd4 molecule Source RGD Symbol Acc 2306
B09	UPFR1023025	ENSRNOT00000055148.4	Cd40	ENSRNOG0000018488	CD40 molecule Source RGD Symbol Acc 619830
B10	UPFR1038741	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
B11	UPFR1086337	ENSRNOT00000050142.5	Cd47	ENSRNOG0000001964	Cd47 molecule Source RGD Symbol Acc 2308
B12	UPFR1046423	ENSRNOT00000006306.7	Cd48	ENSRNOG0000004737	Cd48 molecule Source RGD Symbol Acc 620620
C01	UPFR1021207	ENSRNOT00000025354.7	Cd74	ENSRNOG0000018735	CD74 molecule Source RGD Symbol Acc 2313
C02	UPFR1071567	ENSRNOT00000071609.1	Cd79al	ENSRNOG0000049925	Cd79a molecule-like Source RGD Symbol Acc 1598036
C03	UPFR1027682	ENSRNOT00000027760.7	Cd81	ENSRNOG0000020451	Cd81 molecule Source RGD Symbol Acc 2315
C04	UPFR1094269	ENSRNOT00000009515.4	Cd8a	ENSRNOG0000007178	CD8a molecule Source RGD Symbol Acc 2316
C05	UPFR1073792	ENSRNOT00000009392.7	Cd8b	ENSRNOG0000007129	CD8b molecule Source RGD Symbol Acc 2317
C06	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
C07	UPFR1081389	ENSRNOT00000080616.1	Cr2	ENSRNOG0000034164	complement C3d receptor 2 Source RGD Symbol Acc 1310065
C08	UPFR1084630	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
C09	UPFR1019516	ENSRNOT00000091237.1	Ctla4	ENSRNOG0000054129	cytotoxic T-lymphocyte-associated protein 4 Source RGD Symbol Acc 61975
C10	UPFR1044005	ENSRNOT00000066670.3	Cxcl12	ENSRNOG0000013589	C-X-C motif chemokine ligand 12 Source RGD Symbol Acc 3651
		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	UPFR1083049	ENSRNOT00000016580.3	Cxcr5	ENSRNOG0000012430	C-X-C motif chemokine receptor 5 Source RGD Symbol Acc 62010
D01	UPFR1076130	ENSRNOT00000077788.1	Dpp4	ENSRNOG0000030763	dipeptidylpeptidase 4 Source RGD Symbol Acc 2515
D02	UPFR1034050	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
D03	UPFR1093483	ENSRNOT00000088957.1	Flt3	ENSRNOG0000054764	fms-related tyrosine kinase 3 Source RGD Symbol Acc 61308
D04	UPFR1116172	ENSRNOT00000091146.1	Foxp3	ENSRNOG0000011702	forkhead box P3 Source RGD Symbol Acc 1562112
D05	UPFR1014170	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG0000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
D06	UPFR1031281	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
D07	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D08	UPFR1113235	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D09	UPFR1065504	ENSRNOT00000023489.5	Il11	ENSRNOG0000017386	interleukin 11 Source RGD Symbol Acc 621475
D10	UPFR1060283	ENSRNOT00000005898.6	Il12b	ENSRNOG0000004380	interleukin 12B Source RGD Symbol Acc 628704
D11	UPFR1102147	ENSRNOT00000004590.6	Il15	ENSRNOG0000003439	interleukin 15 Source RGD Symbol Acc 2887
D12	UPFR1053861	ENSRNOT00000013093.6	Il18	ENSRNOG0000009848	interleukin 18 Source RGD Symbol Acc 2889
E01	UPFR1102668	ENSRNOT00000020194.7	Il18r1	ENSRNOG0000015027	interleukin 18 receptor 1 Source RGD Symbol Acc 1308589
E02	UPFR1121351	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E03	UPFR1070791	ENSRNOT00000023327.2	Il2	ENSRNOG0000017348	interleukin 2 Source RGD Symbol Acc 620047
E04	UPFR1104994	ENSRNOT00000025950.5	Il27	ENSRNOG0000019170	interleukin 27 Source RGD Symbol Acc 1561420
E05	UPFR1114337	ENSRNOT00000073144.2	Il2ra	ENSRNOG0000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
E06	UPFR1099283	ENSRNOT00000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
E07	UPFR1098910	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E08	UPFR1101991	ENSRNOT00000016091.7	Il7	ENSRNOG0000011973	interleukin 7 Source RGD Symbol Acc 2904
E09	UPFR1056586	ENSRNOT00000027227.4	Inha	ENSRNOG0000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
E10	UPFR1026456	ENSRNOT00000088931.1	Irf4	ENSRNOG0000061070	interferon regulatory factor 4 Source RGD Symbol Acc 1308050
E11	UPFR1115003	ENSRNOT00000019213.6	Jag2	ENSRNOG0000013927	jagged 2 Source RGD Symbol Acc 2938
E12	UPFR1096418	ENSRNOT00000012936.6	Lck	ENSRNOG0000009705	LCK proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 2994
F01	UPFR1103973	ENSRNOT00000007654.5	LOC100910771	ENSRNOG0000005724	mitogen-activated protein kinase kinase kinase 7-like Source RGD Symbol Acc 6496502
F02	UPFR1013781	ENSRNOT00000028433.7	Ms4a1	ENSRNOG0000020945	membrane spanning 4-domains A1 Source RGD Symbol Acc 1311999
F03	UPFR1102375	ENSRNOT00000020330.7	Nck1	ENSRNOG0000014917	NCK adaptor protein 1 Source RGD Symbol Acc 1310688
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	UPFR1073381	ENSRNOT00000044287.4	AABR07031756.1	ENSRNOG0000014096	nuclear receptor subfamily 3, group C, member 1 Source NCBI gene Acc 24413
F06	UPFR1047503	ENSRNOT00000067983.1	Pax1	ENSRNOG0000024882	paired box 1 Source RGD Symbol Acc 1588548
F07	UPFR1021156	ENSRNOT00000021614.6	Pdcd1lg2	ENSRNOG0000016136	programmed cell death 1 ligand 2 Source RGD Symbol Acc 1306403
F08	UPFR1035231	ENSRNOT00000075057.1	Pik3r1	ENSRNOG0000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
F09	UPFR1045135	ENSRNOT00000025858.7	Prkcd	ENSRNOG0000016346	protein kinase C, delta Source RGD Symbol Acc 67383
F10	UPFR1069425	ENSRNOT00000025901.6	Prkcq	ENSRNOG0000019057	protein kinase C, theta Source RGD Symbol Acc 620968

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1062377	ENSRNOT00000084624.1	Prlr	ENSRNOG0000057557	prolactin receptor Source RGD Symbol Acc 3407
F12	UPFR1047359	ENSRNOT00000064785.3	Ptpnc	ENSRNOG0000000655	protein tyrosine phosphatase, receptor type, C Source RGD Symbol Acc 3451
G01	UPFR1083124	ENSRNOT00000006115.5	Rag1	ENSRNOG0000004630	recombination activating 1 Source RGD Symbol Acc 619790
G02	UPFR1106307	ENSRNOT00000003458.3	Socs1	ENSRNOG0000002568	suppressor of cytokine signaling 1 Source RGD Symbol Acc 69272
G03	UPFR1100110	ENSRNOT00000067875.4	Spp1	ENSRNOG0000004351	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
G04	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G05	UPFR1066076	ENSRNOT00000059124.3	Tlr1	ENSRNOG0000038722	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
G06	UPFR1020675	ENSRNOT00000014020.3	Tlr4	ENSRNOG00000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G07	UPFR1064975	ENSRNOT00000002933.5	Tlr6	ENSRNOG00000002161	toll-like receptor 6 Source RGD Symbol Acc 1303030
G08	UPFR1025657	ENSRNOT00000074247.1	Tnfrsf14	ENSRNOG00000047730	TNF superfamily member 14 Source RGD Symbol Acc 1588572
G09	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G10	UPFR1106871	ENSRNOT00000006148.5	Traf6	ENSRNOG00000004639	TNF receptor associated factor 6 Source RGD Symbol Acc 1306853
G11	UPFR1074622	ENSRNOT00000073294.2	Vav1	ENSRNOG00000050430	vav guanine nucleotide exchange factor 1 Source RGD Symbol Acc 3951
G12	UPFR1114413	ENSRNOT00000051439.4	Was	ENSRNOG00000031058	Wiskott-Aldrich syndrome Source RGD Symbol Acc 1563567
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	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.

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 or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.