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

Rat JAK / STAT Signaling Pathway

Cat. no. 249955 UPRN-039ZR

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	LOC100911545	Akt1	Bcl2l1	Ccnd1	Cdkn1a	Cebpb	Cebpd	Crk	Crp	Csf1r	Cxcl9	Egfr
B	Epor	F2	Fas	Fcer2	Fcgr1a	Gata3	Gbp4	Ghr	Grb2	Ifnar1	Ifng	Ifngr1
C	Il10ra	Il10rb	Il20	Il2ra	Il2rg	Il4	Il4r	Il6st	Insr	Irf1	Irf9	Isg15
D	Jak1	Jak2	Jak3	Jun	Junb	Lrg1	Oas1a	Mpl	Myc	Nfkb1	Nos2	AABR07031756.1
E	Osm	Pdgfra	Pias1	Pias2	Prl	Prlr	Ptpn1	Ptpn11	Ptprc	Sh2b1	Sirpa	Smad1
F	Smad2	Smad3	Smad4	Smad5	Socs1	Socs2	Socs3	Socs4	Socs5	Sp1	Spi1	Src
G	Stam	Hnf4a	Stat2	Stat3	Stat1	Stat5a	Stat5b	Stat6	Stub1	Tyk2	Usf1	Yy1
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	UPFR1057650	ENSRNOT00000019346.6	LOC100911545	ENSRNOG00000028896	alpha-2-macroglobulin-like Source RGD Symbol Acc 6492449
A02	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG00000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	UPFR1047186	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG00000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A04	UPFR1042457	ENSRNOT00000088588.1	Ccnd1	ENSRNOG00000020918	cyclin D1 Source RGD Symbol Acc 68384
A05	UPFR1028644	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG00000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
A06	UPFR1126579	ENSRNOT00000083876.1	Cebpb	ENSRNOG00000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
A07	UPFR1073105	ENSRNOT00000074586.2	Cebpd	ENSRNOG00000050869	CCAAT/enhancer binding protein delta Source RGD Symbol Acc 2328
A08	UPFR1113088	ENSRNOT00000006407.4	Crk	ENSRNOG00000025792	CRK proto-oncogene, adaptor protein Source RGD Symbol Acc 2405
A09	UPFR1072132	ENSRNOT00000000058.6	Crp	ENSRNOG00000000053	C-reactive protein Source RGD Symbol Acc 2411
A10	UPFR1084539	ENSRNOT00000049357.4	Csf1r	ENSRNOG00000018414	colony stimulating factor 1 receptor Source RGD Symbol Acc 2425
A11	UPFR1089821	ENSRNOT00000003082.7	Cxcl9	ENSRNOG00000022242	C-X-C motif chemokine ligand 9 Source RGD Symbol Acc 628798
A12	UPFR1091984	ENSRNOT00000006087.2	Egfr	ENSRNOG00000004332	epidermal growth factor receptor Source RGD Symbol Acc 2543
B01	UPFR1046879	ENSRNOT00000017369.4	Epor	ENSRNOG00000012619	erythropoietin receptor Source RGD Symbol Acc 2560
B02	UPFR1087878	ENSRNOT00000022233.5	F2	ENSRNOG00000016325	coagulation factor II Source RGD Symbol Acc 61996
B03	UPFR1075141	ENSRNOT00000025928.5	Fas	ENSRNOG00000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
B04	UPFR1096454	ENSRNOT00000001333.4	Fcer2	ENSRNOG00000001005	Fc fragment of IgE receptor II Source RGD Symbol Acc 619997
B05	UPFR1045164	ENSRNOT00000082450.1	Fcgr1a	ENSRNOG00000021199	Fc fragment of IgG receptor Ia Source RGD Symbol Acc 1309912
B06	UPFR1027517	ENSRNOT00000026187.5	Gata3	ENSRNOG00000019336	GATA binding protein 3 Source RGD Symbol Acc 621250
B07	UPFR1014679	ENSRNOT00000022648.5	Gbp4	ENSRNOG00000028768	guanylate binding protein 4 Source RGD Symbol Acc 1310579
B08	UPFR1025911	ENSRNOT00000046951.5	Ghr	ENSRNOG00000015654	growth hormone receptor Source RGD Symbol Acc 2687
B09	UPFR1087543	ENSRNOT00000005347.5	Grb2	ENSRNOG00000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
B10	UPFR1118453	ENSRNOT00000091472.1	Ifnar1	ENSRNOG00000028594	interferon alpha and beta receptor subunit 1 Source RGD Symbol Acc 1305399
B11	UPFR1084134	ENSRNOT00000009919.2	Ifng	ENSRNOG00000007468	interferon gamma Source RGD Symbol Acc 2866
B12	UPFR1044606	ENSRNOT00000016286.6	Ifngr1	ENSRNOG00000012074	interferon gamma receptor 1 Source RGD Symbol Acc 620570
C01	UPFR1086231	ENSRNOT00000021926.4	Il10ra	ENSRNOG00000016308	interleukin 10 receptor subunit alpha Source RGD Symbol Acc 620138
C02	UPFR1093831	ENSRNOT00000061345.3	Il10rb	ENSRNOG00000028638	interleukin 10 receptor subunit beta Source RGD Symbol Acc 1560373
C03	UPFR1057089	ENSRNOT00000067006.2	Il20	ENSRNOG00000004633	interleukin 20 Source RGD Symbol Acc 1583578
C04	UPFR1114337	ENSRNOT00000073144.2	Il2ra	ENSRNOG00000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
C05	UPFR1018347	ENSRNOT00000005343.7	Il2rg	ENSRNOG00000003954	interleukin 2 receptor subunit gamma Source RGD Symbol Acc 621466
C06	UPFR1099283	ENSRNOT00000010029.3	Il4	ENSRNOG00000007624	interleukin 4 Source RGD Symbol Acc 2898
C07	UPFR1040939	ENSRNOT00000088073.1	Il4r	ENSRNOG00000015441	interleukin 4 receptor Source RGD Symbol Acc 2899
C08	UPFR1023505	ENSRNOT00000018877.7	Il6st	ENSRNOG00000013963	interleukin 6 signal transducer Source RGD Symbol Acc 2903
C09	UPFR1014864	ENSRNOT00000041155.3	Insr	ENSRNOG00000029986	insulin receptor Source RGD Symbol Acc 2917
C10	UPFR1043289	ENSRNOT00000010968.6	Irf1	ENSRNOG00000008144	interferon regulatory factor 1 Source RGD Symbol Acc 2920
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1076011	026364.4	Irf9	000019478	interferon regulatory factor 9 Source RGD Symbol Acc 1308766
C12	UPFR1047702	ENSRNOT00000 039263.5	Isg15	ENSRNOG00 000021802	ISG15 ubiquitin-like modifier Source RGD Symbol Acc 1310312
D01	UPFR1050030	ENSRNOT00000 064542.1	Jak1	ENSRNOG00 000011157	Janus kinase 1 Source RGD Symbol Acc 69056
D02	UPFR1096799	ENSRNOT00000 087011.1	Jak2	ENSRNOG00 000059968	Janus kinase 2 Source RGD Symbol Acc 2939
D03	UPFR1072637	ENSRNOT00000 079784.1	Jak3	ENSRNOG00 000018669	Janus kinase 3 Source RGD Symbol Acc 2940
D04	UPFR1037970	ENSRNOT00000 011731.3	Jun	ENSRNOG00 000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D05	UPFR1102181	ENSRNOT00000 067780.3	Junb	ENSRNOG00 000042838	JunB proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2944
D06	UPFR1037204	ENSRNOT00000 074993.2	Lrg1	ENSRNOG00 000049918	leucine-rich alpha-2-glycoprotein 1 Source RGD Symbol Acc 1359464
D07	UPFR1056209	ENSRNOT00000 038426.6	Oas1a	ENSRNOG00 000001369	2 -5 oligoadenylate synthetase 1A Source RGD Symbol Acc 621760
D08	UPFR1107508	ENSRNOT00000 093502.1	Mpl	ENSRNOG00 000028377	MPL proto-oncogene, thrombopoietin receptor Source RGD Symbol Acc 1311069
D09	UPFR1101439	ENSRNOT00000 006188.5	Myc	ENSRNOG00 000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
D10	UPFR1116688	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
D11	UPFR1092405	ENSRNOT00000 016133.6	Nos2	ENSRNOG00 000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
D12	UPFR1073381	ENSRNOT00000 044287.4	AABR0703 1756.1	ENSRNOG00 000014096	nuclear receptor subfamily 3, group C, member 1 Source NCBI gene Acc 24413
E01	UPFR1058346	ENSRNOT00000 035591.3	Osm	ENSRNOG00 000024390	oncostatin M Source RGD Symbol Acc 1585012
E02	UPFR1089489	ENSRNOT00000 003077.5	Pdgfra	ENSRNOG00 000002244	platelet derived growth factor receptor alpha Source RGD Symbol Acc 3284
E03	UPFR1101799	ENSRNOT00000 066009.1	Pias1	ENSRNOG00 000034272	protein inhibitor of activated STAT, 1 Source RGD Symbol Acc 1307843
E04	UPFR1100624	ENSRNOT00000 023886.5	Pias2	ENSRNOG00 000017493	protein inhibitor of activated STAT, 2 Source RGD Symbol Acc 71056
E05	UPFR1015066	ENSRNOT00000 023412.4	Prl	ENSRNOG00 000017374	prolactin Source RGD Symbol Acc 3403
E06	UPFR1062377	ENSRNOT00000 084624.1	Prlr	ENSRNOG00 000057557	prolactin receptor Source RGD Symbol Acc 3407
E07	UPFR1035305	ENSRNOT00000 014309.4	Ptpn1	ENSRNOG00 000010574	protein tyrosine phosphatase, non-receptor type 1 Source RGD Symbol Acc 61965
E08	UPFR1116105	ENSRNOT00000 046323.5	Ptpn11	ENSRNOG00 000030124	protein tyrosine phosphatase, non-receptor type 11 Source RGD Symbol Acc 3447
E09	UPFR1047359	ENSRNOT00000 064785.3	Ptprc	ENSRNOG00 000000655	protein tyrosine phosphatase, receptor type, C Source RGD Symbol Acc 3451
E10	UPFR1098417	ENSRNOT00000 071241.3	Sh2b1	ENSRNOG00 000049181	SH2B adaptor protein 1 Source RGD Symbol Acc 620132
E11	UPFR1095083	ENSRNOT00000 006408.6	Sirpa	ENSRNOG00 000004763	signal-regulatory protein alpha Source RGD Symbol Acc 3449
E12	UPFR1071849	ENSRNOT00000 025079.6	Smad1	ENSRNOG00 000018483	SMAD family member 1 Source RGD Symbol Acc 3030
F01	UPFR1057367	ENSRNOT00000 046847.4	Smad2	ENSRNOG00 000018140	SMAD family member 2 Source RGD Symbol Acc 3031
F02	UPFR1033812	ENSRNOT00000 039730.4	Smad3	ENSRNOG00 000008620	SMAD family member 3 Source RGD Symbol Acc 3032
F03	UPFR1022605	ENSRNOT00000 082484.1	Smad4	ENSRNOG00 000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F04	UPFR1115197	ENSRNOT00000 016704.4	Smad5	ENSRNOG00 000022870	SMAD family member 5 Source RGD Symbol Acc 620158
F05	UPFR1106307	ENSRNOT00000 003458.3	Socs1	ENSRNOG00 000002568	suppressor of cytokine signaling 1 Source RGD Symbol Acc 69272
F06	UPFR1032702	ENSRNOT00000 011948.4	Socs2	ENSRNOG00 000008965	suppressor of cytokine signaling 2 Source NCBI gene Acc 84607
F07	UPFR1069728	ENSRNOT00000 003940.3	Socs3	ENSRNOG00 000002946	suppressor of cytokine signaling 3 Source RGD Symbol Acc 621087
F08	UPFR1065482	ENSRNOT00000 015120.6	Socs4	ENSRNOG00 000011377	suppressor of cytokine signaling 4 Source RGD Symbol Acc 1306503
F09	UPFR1019612	ENSRNOT00000 020337.4	Socs5	ENSRNOG00 000028504	suppressor of cytokine signaling 5 Source RGD Symbol Acc 1564914
F10	UPFR1092400	ENSRNOT00000 019403.6	Sp1	ENSRNOG00 000014084	Sp1 transcription factor Source RGD Symbol Acc 3738

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1093315	ENSRNOT00000016306.6	Spi1	ENSRNOG00000012172	Spi-1 proto-oncogene Source RGD Symbol Acc 1359607
F12	UPFR1050158	ENSRNOT00000012739.4	Src	ENSRNOG00000009495	SRC proto-oncogene, non-receptor tyrosine kinase Source RGD Symbol Acc 620795
G01	UPFR1082160	ENSRNOT00000087129.1	Stam	ENSRNOG00000060817	signal transducing adaptor molecule Source RGD Symbol Acc 1564499
G02	UPFR1098273	ENSRNOT00000089893.1	Hnf4a	ENSRNOG00000008895	hepatocyte nuclear factor 4, alpha Source RGD Symbol Acc 2810
G03	UPFR1019713	ENSRNOT00000049536.4	Stat2	ENSRNOG00000031081	signal transducer and activator of transcription 2 Source RGD Symbol Acc 1311649
G04	UPFR1040072	ENSRNOT00000026760.4	Stat3	ENSRNOG00000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
G05	UPFR1068760	ENSRNOT00000083514.1	Stat1	ENSRNOG00000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
G06	UPFR1042053	ENSRNOT00000026662.3	Stat5a	ENSRNOG00000019496	signal transducer and activator of transcription 5A Source RGD Symbol Acc 3773
G07	UPFR1050387	ENSRNOT00000026354.3	Stat5b	ENSRNOG00000019075	signal transducer and activator of transcription 5B Source RGD Symbol Acc 3774
G08	UPFR1082210	ENSRNOT00000085350.1	Stat6	ENSRNOG00000025023	signal transducer and activator of transcription 6 Source RGD Symbol Acc 1309063
G09	UPFR1091827	ENSRNOT00000026921.6	Stub1	ENSRNOG00000019798	STIP1 homology and U-box containing protein 1 Source RGD Symbol Acc 1306167
G10	UPFR1056755	ENSRNOT00000041678.5	Tyk2	ENSRNOG00000032948	tyrosine kinase 2 Source RGD Symbol Acc 2320469
G11	UPFR1095917	ENSRNOT00000005811.4	Usf1	ENSRNOG00000004255	upstream transcription factor 1 Source RGD Symbol Acc 620974
G12	UPFR1036791	ENSRNOT00000005743.3	Yy1	ENSRNOG00000004339	YY1 transcription factor Source RGD Symbol Acc 3982
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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.