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

Human JAK / STAT Signaling Pathway

Cat. no. 249955 UPHS-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	A2M	AKT1	BCL2L1	CCND1	CDKN1A	CEBPB	CEBPD	CRK	CRP	CSF1R	CXCL9	EGFR
B	EPOR	F2	F2R	FAS	FCER2	FCGR1A	GATA3	GHR	GRB2	HMGA1	IFNAR1	IFNG
C	IFNGR1	IL10RA	IL20	IL2RA	IL2RG	IL4	IL4R	IL6ST	INSR	IRF1	IRF9	ISG15
D	JAK1	JAK2	JAK3	JUN	JUNB	LRG1	MCL1	MPL	MYC	NFKB1	NOS2	NR3C1
E	OAS1	OSM	PDGFRA	PIAS1	PIAS2	PRL	PRLR	PTPN1	PTPN11	PTPRC	SH2B1	SMAD1
F	SMAD2	SMAD3	SMAD4	SMAD5	SOCS1	SOCS2	SOCS3	SOCS4	SOCS5	SP1	SPI1	SRC
G	STAM	STAT1	STAT2	STAT3	STAT4	STAT5A	STAT5B	STAT6	STUB1	TYK2	USF1	YY1
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH0373870	ENST00000472360.1	A2M	ENSG00000175899	alpha-2-macroglobulin Source HGNC Symbol Acc HGNC 7
A02	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	UPFH1132271	ENST00000376062.6	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A04	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
A05	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
A06	UPFH0202295	ENST00000303004.4	CEBPB	ENSG00000172216	CCAAT enhancer binding protein beta Source HGNC Symbol Acc HGNC 1834
A07	UPFH0348961	ENST00000408965.3	CEBPD	ENSG00000221869	CCAAT enhancer binding protein delta Source HGNC Symbol Acc HGNC 1835
A08	UPFH0150681	ENST00000572145.1	CRK	ENSG00000167193	CRK proto-oncogene, adaptor protein Source HGNC Symbol Acc HGNC 2362
A09	UPFH0143745	ENST00000255030.9	CRP	ENSG00000132693	C-reactive protein Source HGNC Symbol Acc HGNC 2367
A10	UPFH0123457	ENST00000504875.5	CSF1R	ENSG00000182578	colony stimulating factor 1 receptor Source HGNC Symbol Acc HGNC 2433
A11	UPFH0222764	ENST00000264888.5	CXCL9	ENSG00000138755	C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098
A12	UPFH1132381	ENST00000420316.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
B01	UPFH0349780	ENST00000588681.5	EPOR	ENSG00000187266	erythropoietin receptor Source HGNC Symbol Acc HGNC 3416
B02	UPFH0125116	ENST00000311907.9	F2	ENSG00000180210	coagulation factor II, thrombin Source HGNC Symbol Acc HGNC 3535
B03	UPFH1132392	ENST00000319211.5	F2R	ENSG00000181104	coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537
B04	UPFH1132395	ENST00000357339.6	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
B05	UPFH0089548	ENST00000346664.9	FCER2	ENSG00000104921	Fc fragment of IgE receptor II Source HGNC Symbol Acc HGNC 3612
B06	UPFH0313882	ENST00000444948.5	FCGR1A	ENSG00000150337	Fc fragment of IgG receptor Ia Source HGNC Symbol Acc HGNC 3613
B07	UPFH1132416	ENST00000645492.1	GATA3	ENSG00000107485	GATA binding protein 3 Source HGNC Symbol Acc HGNC 4172
B08	UPFH0603133	ENST00000230882.9	GHR	ENSG00000112964	growth hormone receptor Source HGNC Symbol Acc HGNC 4263
B09	UPFH1132426	ENST00000392564.5	GRB2	ENSG00000177885	growth factor receptor bound protein 2 Source HGNC Symbol Acc HGNC 4566
B10	UPFH0412000	ENST00000447654.5	HMGA1	ENSG00000137309	high mobility group AT-hook 1 Source HGNC Symbol Acc HGNC 5010
B11	UPFH1132472	ENST00000270139.8	IFNAR1	ENSG00000142166	interferon alpha and beta receptor subunit 1 Source HGNC Symbol Acc HGNC 5432
B12	UPFH1132473	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C01	UPFH0492557	ENST00000367739.8	IFNGR1	ENSG00000027697	interferon gamma receptor 1 Source HGNC Symbol Acc HGNC 5439
C02	UPFH0594844	ENST00000227752.7	IL10RA	ENSG00000110324	interleukin 10 receptor subunit alpha Source HGNC Symbol Acc HGNC 5964
C03	UPFH0297773	ENST00000391930.3	IL20	ENSG00000162891	interleukin 20 Source HGNC Symbol Acc HGNC 6002
C04	UPFH0323649	ENST00000447847.1	IL2RA	ENSG00000134460	interleukin 2 receptor subunit alpha Source HGNC Symbol Acc HGNC 6008
C05	UPFH0559324	ENST00000482750.5	IL2RG	ENSG00000147168	interleukin 2 receptor subunit gamma Source HGNC Symbol Acc HGNC 6010
C06	UPFH0226437	ENST00000231449.7	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
C07	UPFH0363455	ENST00000563886.1	IL4R	ENSG00000077238	interleukin 4 receptor Source HGNC Symbol Acc HGNC 6015
C08	UPFH0582962	ENST00000523039.5	IL6ST	ENSG00000134352	interleukin 6 signal transducer Source HGNC Symbol Acc HGNC 6021
C09	UPFH0483358	ENST00000598216.1	INSR	ENSG00000171105	insulin receptor Source HGNC Symbol Acc HGNC 6091
C10	UPFH1132490	ENST00000476613.1	IRF1	ENSG00000125347	interferon regulatory factor 1 Source HGNC Symbol Acc HGNC 6116
		ENST00000396		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0526820	864.7	IRF9	213928	interferon regulatory factor 9 Source HGNC Symbol Acc HGNC 6131
C12	UPFH1132494	ENST00000379389.4	ISG15	ENSG00000187608	ISG15 ubiquitin-like modifier Source HGNC Symbol Acc HGNC 4053
D01	UPFH1132963	ENST00000342505.5	JAK1	ENSG00000162434	Janus kinase 1 Source HGNC Symbol Acc HGNC 6190
D02	UPFH1132818	ENST00000381652.3	JAK2	ENSG00000096968	Janus kinase 2 Source HGNC Symbol Acc HGNC 6192
D03	UPFH0316244	ENST00000458235.5	JAK3	ENSG00000105639	Janus kinase 3 Source HGNC Symbol Acc HGNC 6193
D04	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D05	UPFH1132504	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D06	UPFH1132524	ENST00000306390.7	LRG1	ENSG00000171236	leucine rich alpha-2-glycoprotein 1 Source HGNC Symbol Acc HGNC 29480
D07	UPFH1132538	ENST00000369026.3	MCL1	ENSG00000143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
D08	UPFH0133314	ENST00000413998.7	MPL	ENSG00000117400	MPL proto-oncogene, thrombopoietin receptor Source HGNC Symbol Acc HGNC 7217
D09	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D10	UPFH1132828	ENST00000226574.9	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
D11	UPFH0572128	ENST00000313735.10	NOS2	ENSG00000007171	nitric oxide synthase 2 Source HGNC Symbol Acc HGNC 7873
D12	UPFH1132917	ENST00000394464.7	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
E01	UPFH1132918	ENST00000550689.1	OAS1	ENSG00000089127	2 -5 -oligoadenylate synthetase 1 Source HGNC Symbol Acc HGNC 8086
E02	UPFH1132603	ENST00000215781.3	OSM	ENSG00000099985	oncostatin M Source HGNC Symbol Acc HGNC 8506
E03	UPFH1132609	ENST00000508170.5	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
E04	UPFH0576177	ENST00000545237.1	PIAS1	ENSG00000033800	protein inhibitor of activated STAT 1 Source HGNC Symbol Acc HGNC 2752
E05	UPFH0400451	ENST00000545673.5	PIAS2	ENSG00000078043	protein inhibitor of activated STAT 2 Source HGNC Symbol Acc HGNC 17311
E06	UPFH0580799	ENST00000615510.4	PRL	ENSG00000172179	prolactin Source HGNC Symbol Acc HGNC 9445
E07	UPFH1124455	ENST00000542609.5	PRLR	ENSG00000113494	prolactin receptor Source HGNC Symbol Acc HGNC 9446
E08	UPFH0306220	ENST00000371621.5	PTPN1	ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1 Source HGNC Symbol Acc HGNC 9642
E09	UPFH0249323	ENST00000530818.1	PTPN11	ENSG00000179295	protein tyrosine phosphatase, non-receptor type 11 Source HGNC Symbol Acc HGNC 9644
E10	UPFH0448301	ENST00000367367.8	PTPRC	ENSG00000081237	protein tyrosine phosphatase, receptor type C Source HGNC Symbol Acc HGNC 9666
E11	UPFH0254505	ENST00000618521.4	SH2B1	ENSG00000178188	SH2B adaptor protein 1 Source HGNC Symbol Acc HGNC 30417
E12	UPFH1132685	ENST00000515385.1	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F01	UPFH1132686	ENST00000585978.1	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F02	UPFH1132840	ENST00000439724.7	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
F03	UPFH0151428	ENST00000342988.7	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F04	UPFH1132687	ENST00000509297.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
F05	UPFH1132887	ENST00000644787.1	SOCS1	ENSG00000185338	suppressor of cytokine signaling 1 Source HGNC Symbol Acc HGNC 19383
F06	UPFH0351314	ENST00000548537.1	SOCS2	ENSG00000120833	suppressor of cytokine signaling 2 Source HGNC Symbol Acc HGNC 19382
F07	UPFH1132974	ENST00000330871.3	SOCS3	ENSG00000184557	suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391
F08	UPFH0459161	ENST00000395472.2	SOCS4	ENSG00000180008	suppressor of cytokine signaling 4 Source HGNC Symbol Acc HGNC 19392
F09	UPFH0133368	ENST00000306503.5	SOCS5	ENSG00000171150	suppressor of cytokine signaling 5 Source HGNC Symbol Acc HGNC 16852
F10	UPFH1132843	ENST00000327443.9	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0097223	ENST00000227163.8	SPI1	ENSG00000066336	Spi-1 proto-oncogene Source HGNC Symbol Acc HGNC 11241
F12	UPFH0308412	ENST00000472968.1	SRC	ENSG00000197122	SRC proto-oncogene, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11283
G01	UPFH0442082	ENST00000494250.1	STAM	ENSG00000136738	signal transducing adaptor molecule Source HGNC Symbol Acc HGNC 11357
G02	UPFH1132696	ENST00000392323.6	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G03	UPFH0338707	ENST00000652741.1	STAT2	ENSG00000170581	signal transducer and activator of transcription 2 Source HGNC Symbol Acc HGNC 11363
G04	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G05	UPFH1132697	ENST00000392320.7	STAT4	ENSG00000138378	signal transducer and activator of transcription 4 Source HGNC Symbol Acc HGNC 11365
G06	UPFH0458805	ENST00000591556.1	STAT5A	ENSG00000126561	signal transducer and activator of transcription 5A Source HGNC Symbol Acc HGNC 11366
G07	UPFH0498337	ENST00000415845.1	STAT5B	ENSG00000173757	signal transducer and activator of transcription 5B Source HGNC Symbol Acc HGNC 11367
G08	UPFH1132845	ENST00000553533.2	STAT6	ENSG00000166888	signal transducer and activator of transcription 6 Source HGNC Symbol Acc HGNC 11368
G09	UPFH0301193	ENST00000566408.5	STUB1	ENSG00000103266	STIP1 homology and U-box containing protein 1 Source HGNC Symbol Acc HGNC 11427
G10	UPFH0496191	ENST00000525621.5	TYK2	ENSG00000105397	tyrosine kinase 2 Source HGNC Symbol Acc HGNC 12440
G11	UPFH0006235	ENST00000368021.7	USF1	ENSG00000158773	upstream transcription factor 1 Source HGNC Symbol Acc HGNC 12593
G12	UPFH0134182	ENST00000553625.5	YY1	ENSG00000100811	YY1 transcription factor Source HGNC Symbol Acc HGNC 12856
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human 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.