

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

Human JAK / STAT Signaling Pathway

Cat. no. 249950 SBHS-039ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA 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 PCR System 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	HMGAI	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	SOC31	SOC32	SOC33	SOC34	SOC35	SP1	SP11	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 PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0203648	ENST00000472360.1	A2M	ENSG00000175899	alpha-2-macroglobulin Source HGNC Symbol Acc HGNC 7
A02	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	SBH0216029	ENST00000450273.1	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A04	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
A05	SBH0608500	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
A06	SBH0569983	ENST00000303004.4	CEBPB	ENSG00000172216	CCAAT enhancer binding protein beta Source HGNC Symbol Acc HGNC 1834
A07	SBH0227697	ENST00000408965.3	CEBPD	ENSG00000221869	CCAAT enhancer binding protein delta Source HGNC Symbol Acc HGNC 1835
A08	SBH0257676	ENST00000574295.1	CRK	ENSG00000167193	CRK proto-oncogene, adaptor protein Source HGNC Symbol Acc HGNC 2362
A09	SBH0187022	ENST00000255030.9	CRP	ENSG00000132693	C-reactive protein Source HGNC Symbol Acc HGNC 2367
A10	SBH0210500	ENST00000286301.7	CSF1R	ENSG00000182578	colony stimulating factor 1 receptor Source HGNC Symbol Acc HGNC 2433
A11	SBH0383348	ENST00000264888.5	CXCL9	ENSG00000138755	C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098
A12	SBH1219970	ENST00000454757.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
B01	SBH0577732	ENST00000592375.6	EPOR	ENSG00000187266	erythropoietin receptor Source HGNC Symbol Acc HGNC 3416
B02	SBH0051863	ENST00000442468.1	F2	ENSG00000180210	coagulation factor II, thrombin Source HGNC Symbol Acc HGNC 3535
B03	SBH1219989	ENST00000319211.5	F2R	ENSG00000181104	coagulation factor II thrombin receptor Source HGNC Symbol Acc HGNC 3537
B04	SBH1219994	ENST00000652046.1	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
B05	SBH0569109	ENST00000346664.9	FCER2	ENSG00000104921	Fc fragment of IgE receptor II Source HGNC Symbol Acc HGNC 3612
B06	SBH0043666	ENST00000444948.5	FCGR1A	ENSG00000150337	Fc fragment of IgG receptor Ia Source HGNC Symbol Acc HGNC 3613
B07	SBH0349339	ENST00000346208.4	GATA3	ENSG00000107485	GATA binding protein 3 Source HGNC Symbol Acc HGNC 4172
B08	SBH0038120	ENST00000230882.9	GHR	ENSG00000112964	growth hormone receptor Source HGNC Symbol Acc HGNC 4263
B09	SBH1220038	ENST00000392563.5	GRB2	ENSG00000177885	growth factor receptor bound protein 2 Source HGNC Symbol Acc HGNC 4566
B10	SBH0403034	ENST00000311487.9	HMGA1	ENSG00000137309	high mobility group AT-hook 1 Source HGNC Symbol Acc HGNC 5010
B11	SBH1220087	ENST00000442071.2	IFNAR1	ENSG00000142166	interferon alpha and beta receptor subunit 1 Source HGNC Symbol Acc HGNC 5432
B12	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
C01	SBH0279641	ENST00000367739.8	IFNGR1	ENSG00000027697	interferon gamma receptor 1 Source HGNC Symbol Acc HGNC 5439
C02	SBH0388417	ENST00000227752.7	IL10RA	ENSG00000110324	interleukin 10 receptor subunit alpha Source HGNC Symbol Acc HGNC 5964
C03	SBH0348023	ENST00000391930.3	IL20	ENSG00000162891	interleukin 20 Source HGNC Symbol Acc HGNC 6002
C04	SBH0567688	ENST00000447847.1	IL2RA	ENSG00000134460	interleukin 2 receptor subunit alpha Source HGNC Symbol Acc HGNC 6008
C05	SBH0005272	ENST00000487883.1	IL2RG	ENSG00000147168	interleukin 2 receptor subunit gamma Source HGNC Symbol Acc HGNC 6010
C06	SBH1220109	ENST00000350025.2	IL4	ENSG00000113520	interleukin 4 Source HGNC Symbol Acc HGNC 6014
C07	SBH0492526	ENST00000565915.5	IL4R	ENSG00000077238	interleukin 4 receptor Source HGNC Symbol Acc HGNC 6015
C08	SBH0280973	ENST00000503773.6	IL6ST	ENSG00000134352	interleukin 6 signal transducer Source HGNC Symbol Acc HGNC 6021
C09	SBH0198962	ENST00000600492.1	INSR	ENSG00000171105	insulin receptor Source HGNC Symbol Acc HGNC 6091
C10	SBH1220122	ENST00000245414.9	IRF1	ENSG00000125347	interferon regulatory factor 1 Source HGNC Symbol Acc HGNC 6116
		ENST00000396		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220126	864.7	IRF9	213928	interferon regulatory factor 9 Source HGNC Symbol Acc HGNC 6131
C12	SBH0407556	ENST00000649529.1	ISG15	ENSG00000187608	ISG15 ubiquitin-like modifier Source HGNC Symbol Acc HGNC 4053
D01	SBH1220142	ENST00000342505.5	JAK1	ENSG00000162434	Janus kinase 1 Source HGNC Symbol Acc HGNC 6190
D02	SBH0334185	ENST00000381652.3	JAK2	ENSG00000096968	Janus kinase 2 Source HGNC Symbol Acc HGNC 6192
D03	SBH0438127	ENST00000527670.5	JAK3	ENSG00000105639	Janus kinase 3 Source HGNC Symbol Acc HGNC 6193
D04	SBH0613340	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D05	SBH1220143	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D06	SBH1220176	ENST00000306390.7	LRG1	ENSG00000171236	leucine rich alpha-2-glycoprotein 1 Source HGNC Symbol Acc HGNC 29480
D07	SBH1220199	ENST00000620947.4	MCL1	ENSG00000143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
D08	SBH0641426	ENST00000413998.7	MPL	ENSG00000117400	MPL proto-oncogene, thrombopoietin receptor Source HGNC Symbol Acc HGNC 7217
D09	SBH0426145	ENST00000524013.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D10	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
D11	SBH0408796	ENST00000313735.10	NOS2	ENSG00000007171	nitric oxide synthase 2 Source HGNC Symbol Acc HGNC 7873
D12	SBH1220280	ENST00000652686.1	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
E01	SBH1220283	ENST00000452357.6	OAS1	ENSG00000089127	2'-5'-oligoadenylate synthetase 1 Source HGNC Symbol Acc HGNC 8086
E02	SBH1220287	ENST00000215781.3	OSM	ENSG00000099985	oncostatin M Source HGNC Symbol Acc HGNC 8506
E03	SBH1220292	ENST00000257290.10	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
E04	SBH0637544	ENST00000562190.1	PIAS1	ENSG00000033800	protein inhibitor of activated STAT 1 Source HGNC Symbol Acc HGNC 2752
E05	SBH0433845	ENST00000592212.5	PIAS2	ENSG00000078043	protein inhibitor of activated STAT 2 Source HGNC Symbol Acc HGNC 17311
E06	SBH0553464	ENST00000615510.4	PRL	ENSG00000172179	prolactin Source HGNC Symbol Acc HGNC 9445
E07	SBH0399362	ENST00000511486.5	PRLR	ENSG00000113494	prolactin receptor Source HGNC Symbol Acc HGNC 9446
E08	SBH0048297	ENST00000541713.5	PTPN1	ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1 Source HGNC Symbol Acc HGNC 9642
E09	SBH0531473	ENST00000392597.5	PTPN11	ENSG00000179295	protein tyrosine phosphatase, non-receptor type 11 Source HGNC Symbol Acc HGNC 9644
E10	SBH0081266	ENST00000491302.1	PTPRC	ENSG00000081237	protein tyrosine phosphatase, receptor type C Source HGNC Symbol Acc HGNC 9666
E11	SBH0381451	ENST00000538342.5	SH2B1	ENSG00000178188	SH2B adaptor protein 1 Source HGNC Symbol Acc HGNC 30417
E12	SBH1220404	ENST00000394092.6	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F01	SBH1220405	ENST00000262160.11	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F02	SBH0216540	ENST00000558428.5	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
F03	SBH1220406	ENST00000588745.5	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F04	SBH1220407	ENST00000545279.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
F05	SBH1220412	ENST00000644787.1	SOC31	ENSG00000185338	suppressor of cytokine signaling 1 Source HGNC Symbol Acc HGNC 19383
F06	SBH0278324	ENST00000549122.5	SOC32	ENSG00000120833	suppressor of cytokine signaling 2 Source HGNC Symbol Acc HGNC 19382
F07	SBH1220413	ENST00000330871.3	SOC33	ENSG00000184557	suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391
F08	SBH0346541	ENST00000339298.2	SOC34	ENSG00000180008	suppressor of cytokine signaling 4 Source HGNC Symbol Acc HGNC 19392
F09	SBH0252460	ENST00000306503.5	SOC35	ENSG00000171150	suppressor of cytokine signaling 5 Source HGNC Symbol Acc HGNC 16852
F10	SBH1220419	ENST00000426431.2	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0231963	ENST00000378538.7	SPI1	ENSG00000066336	Spi-1 proto-oncogene Source HGNC Symbol Acc HGNC 11241
F12	SBH0514958	ENST00000489153.1	SRC	ENSG00000197122	SRC proto-oncogene, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11283
G01	SBH0556219	ENST00000445846.1	STAM	ENSG00000136738	signal transducing adaptor molecule Source HGNC Symbol Acc HGNC 11357
G02	SBH0333289	ENST00000361099.7	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G03	SBH1220422	ENST00000314128.9	STAT2	ENSG00000170581	signal transducer and activator of transcription 2 Source HGNC Symbol Acc HGNC 11363
G04	SBH0341614	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G05	SBH1220423	ENST00000392320.7	STAT4	ENSG00000138378	signal transducer and activator of transcription 4 Source HGNC Symbol Acc HGNC 11365
G06	SBH0335854	ENST00000345506.8	STAT5A	ENSG00000126561	signal transducer and activator of transcription 5A Source HGNC Symbol Acc HGNC 11366
G07	SBH0472958	ENST00000481253.2	STAT5B	ENSG00000173757	signal transducer and activator of transcription 5B Source HGNC Symbol Acc HGNC 11367
G08	SBH1220424	ENST00000300134.8	STAT6	ENSG00000166888	signal transducer and activator of transcription 6 Source HGNC Symbol Acc HGNC 11368
G09	SBH0269639	ENST00000564370.5	STUB1	ENSG00000103266	STIP1 homology and U-box containing protein 1 Source HGNC Symbol Acc HGNC 11427
G10	SBH0311688	ENST00000525621.5	TYK2	ENSG00000105397	tyrosine kinase 2 Source HGNC Symbol Acc HGNC 12440
G11	SBH0321028	ENST00000472217.1	USF1	ENSG00000158773	upstream transcription factor 1 Source HGNC Symbol Acc HGNC 12593
G12	SBH0101397	ENST00000553625.5	YY1	ENSG00000100811	YY1 transcription factor Source HGNC Symbol Acc HGNC 12856
H01	SBH1220543	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	SBH1220550	ENST00000558401.6	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	SBH1220545	ENST00000396861.5	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	SBH1220546	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	SBH1220553	ENST00000546989.5	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	SBH1218553	Sybr_HGDC	HGDC	Sybr_HGDC	Human Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA 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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