

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

Human Stress & Toxicity PathwayFinder

Cat. no. 249950 SBHS-003ZR

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	ADM	AKR1B1	AQP1	AQP2	AQP4	ARNT	ATF4	ATF6	ATF6B	ATG12	ATG5	ATG7
B	ATM	ATR	BBC3	BECN1	BID	BNIP3L	CA9	CALR	CASP1	CCL2	CD40LG	CDKN1A
C	CFTR	CHEK1	CHEK2	CRP	DDB2	DDIT3	DNAJC3	EDN1	EPO	FAS	FTH1	GADD45A
D	GADD45G	GCLC	GCLM	GRB2	GSR	GSTP1	HMOX1	HSP90AA1	HSP90B1	HSPA4	HSPA4L	HSPA5
E	HUS1	IFNG	IL1A	IL1B	IL6	CXCL8	LDHA	MCL1	MMP9	MRE11	NBN	NFAT5
F	NQO1	PARP1	PREDX1	PVR	RAD17	RAD51	RAD9A	RIPK1	SERPINE1	SLC2A1	SLC5A3	SQSTM1
G	TLR4	TNF	TNFRSF10A	TNFRSF10B	TNFRSF1A	TP53	TXN	TXNL4B	TXNRD1	ULK1	VEGFA	XPC
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	SBH1219728	ENST00000525063.2	ADM	ENSG00000148926	adrenomedullin Source HGNC Symbol Acc HGNC 259
A02	SBH1219732	ENST00000285930.9	AKR1B1	ENSG00000085662	aldo-keto reductase family 1 member B Source HGNC Symbol Acc HGNC 381
A03	SBH0349409	ENST00000482461.1	AQP1	ENSG00000240583	aquaporin 1 (Colton blood group) Source HGNC Symbol Acc HGNC 633
A04	SBH0594943	ENST00000199280.3	AQP2	ENSG00000167580	aquaporin 2 Source HGNC Symbol Acc HGNC 634
A05	SBH1219750	ENST00000440832.7	AQP4	ENSG00000171885	aquaporin 4 Source HGNC Symbol Acc HGNC 637
A06	SBH1219751	ENST00000358595.10	ARNT	ENSG00000143437	aryl hydrocarbon receptor nuclear translocator Source HGNC Symbol Acc HGNC 700
A07	SBH1219754	ENST00000404241.6	ATF4	ENSG00000128272	activating transcription factor 4 Source HGNC Symbol Acc HGNC 786
A08	SBH1219755	ENST00000367942.4	ATF6	ENSG00000118217	activating transcription factor 6 Source HGNC Symbol Acc HGNC 791
A09	SBH0019495	ENST00000495579.5	ATF6B	ENSG00000213676	activating transcription factor 6 beta Source HGNC Symbol Acc HGNC 2349
A10	SBH0047443	ENST00000513322.5	ATG12	ENSG00000145782	autophagy related 12 Source HGNC Symbol Acc HGNC 588
A11	SBH1219760	ENST00000636437.1	ATG5	ENSG00000057663	autophagy related 5 Source HGNC Symbol Acc HGNC 589
A12	SBH1219761	ENST00000354956.9	ATG7	ENSG00000197548	autophagy related 7 Source HGNC Symbol Acc HGNC 16935
B01	SBH1219763	ENST00000452508.6	ATM	ENSG00000149311	ATM serine/threonine kinase Source HGNC Symbol Acc HGNC 795
B02	SBH1219775	ENST00000350721.9	ATR	ENSG00000175054	ATR serine/threonine kinase Source HGNC Symbol Acc HGNC 882
B03	SBH1219784	ENST00000341983.8	BBC3	ENSG00000105327	BCL2 binding component 3 Source HGNC Symbol Acc HGNC 17868
B04	SBH0399911	ENST00000361523.8	BECN1	ENSG00000126581	beclin 1 Source HGNC Symbol Acc HGNC 1034
B05	SBH0641141	ENST00000622694.4	BID	ENSG00000015475	BH3 interacting domain death agonist Source HGNC Symbol Acc HGNC 1050
B06	SBH1219811	ENST00000523515.5	BNIP3L	ENSG00000104765	BCL2 interacting protein 3 like Source HGNC Symbol Acc HGNC 1085
B07	SBH1219820	ENST00000378357.9	CA9	ENSG00000107159	carbonic anhydrase 9 Source HGNC Symbol Acc HGNC 1383
B08	SBH0031560	ENST00000316448.9	CALR	ENSG00000179218	calreticulin Source HGNC Symbol Acc HGNC 1455
B09	SBH0054226	ENST00000526568.5	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
B10	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B11	SBH1219862	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
B12	SBH0608500	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
C01	SBH1219884	ENST00000649406.1	CFTR	ENSG00000001626	cystic fibrosis transmembrane conductance regulator Source HGNC Symbol Acc HGNC 1884
C02	SBH1219885	ENST00000534070.5	CHEK1	ENSG00000149554	checkpoint kinase 1 Source HGNC Symbol Acc HGNC 1925
C03	SBH0661120	ENST00000416671.5	CHEK2	ENSG00000183765	checkpoint kinase 2 Source HGNC Symbol Acc HGNC 16627
C04	SBH0187022	ENST00000255030.9	CRP	ENSG00000132693	C-reactive protein Source HGNC Symbol Acc HGNC 2367
C05	SBH0176071	ENST00000256996.8	DDB2	ENSG00000134574	damage specific DNA binding protein 2 Source HGNC Symbol Acc HGNC 2718
C06	SBH0602366	ENST00000346473.7	DDIT3	ENSG00000175197	DNA damage inducible transcript 3 Source HGNC Symbol Acc HGNC 2726
C07	SBH1219956	ENST00000602402.6	DNAJC3	ENSG00000102580	DnaJ heat shock protein family (Hsp40) member C3 Source HGNC Symbol Acc HGNC 9439
C08	SBH1219968	ENST00000379375.6	EDN1	ENSG00000078401	endothelin 1 Source HGNC Symbol Acc HGNC 3176
C09	SBH1219979	ENST00000252723.3	EPO	ENSG00000130427	erythropoietin Source HGNC Symbol Acc HGNC 3415
C10	SBH1219994	ENST00000652046.1	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
		ENST00000273		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220010	550.12	FTH1	167996	ferritin heavy chain 1 Source HGNC Symbol Acc HGNC 3976
C12	SBH1220019	ENST00000370985.4	GADD45A	ENSG00000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
D01	SBH1220021	ENST00000252506.11	GADD45G	ENSG00000130222	growth arrest and DNA damage inducible gamma Source HGNC Symbol Acc HGNC 4097
D02	SBH0482856	ENST00000229416.10	GCLC	ENSG00000001084	glutamate-cysteine ligase catalytic subunit Source HGNC Symbol Acc HGNC 4311
D03	SBH1220025	ENST00000615724.1	GCLM	ENSG00000023909	glutamate-cysteine ligase modifier subunit Source HGNC Symbol Acc HGNC 4312
D04	SBH1220038	ENST00000392563.5	GRB2	ENSG00000177885	growth factor receptor bound protein 2 Source HGNC Symbol Acc HGNC 4566
D05	SBH1220042	ENST00000546342.5	GSR	ENSG00000104687	glutathione-disulfide reductase Source HGNC Symbol Acc HGNC 4623
D06	SBH1220043	ENST00000642444.1	GSTP1	ENSG00000084207	glutathione S-transferase pi 1 Source HGNC Symbol Acc HGNC 4638
D07	SBH1220067	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
D08	SBH0323386	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
D09	SBH1220070	ENST00000299767.10	HSP90B1	ENSG00000166598	heat shock protein 90 beta family member 1 Source HGNC Symbol Acc HGNC 12028
D10	SBH1220071	ENST00000617074.4	HSPA4	ENSG00000170606	heat shock protein family A (Hsp70) member 4 Source HGNC Symbol Acc HGNC 5237
D11	SBH0513684	ENST00000515262.1	HSPA4L	ENSG00000164070	heat shock protein family A (Hsp70) member 4 like Source HGNC Symbol Acc HGNC 17041
D12	SBH1220072	ENST00000324460.7	HSPA5	ENSG00000044574	heat shock protein family A (Hsp70) member 5 Source HGNC Symbol Acc HGNC 5238
E01	SBH1220075	ENST00000432627.5	HUS1	ENSG00000136273	HUS1 checkpoint clamp component Source HGNC Symbol Acc HGNC 5309
E02	SBH1220090	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
E03	SBH0663647	ENST00000263339.3	IL1A	ENSG00000115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
E04	SBH0079231	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
E05	SBH1220111	ENST00000401630.7	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
E06	SBH1219932	ENST00000401931.1	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
E07	SBH1225370	ENST00000540430.5	LDHA	ENSG00000134333	lactate dehydrogenase A Source HGNC Symbol Acc HGNC 6535
E08	SBH1220199	ENST00000620947.4	MCL1	ENSG00000143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
E09	SBH0471278	ENST00000372330.3	MMP9	ENSG00000100985	matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176
E10	SBH0627154	ENST00000323977.7	MRE11	ENSG00000020922	MRE11 homolog, double strand break repair nuclease Source HGNC Symbol Acc HGNC 7230
E11	SBH0220644	ENST00000265433.7	NBN	ENSG00000104320	nibrin Source HGNC Symbol Acc HGNC 7652
E12	SBH1220263	ENST00000354436.6	NFAT5	ENSG00000102908	nuclear factor of activated T cells 5 Source HGNC Symbol Acc HGNC 7774
F01	SBH1220279	ENST00000320623.10	NQO1	ENSG00000181019	NAD(P)H quinone dehydrogenase 1 Source HGNC Symbol Acc HGNC 2874
F02	SBH1220289	ENST00000366794.10	PARP1	ENSG00000143799	poly(ADP-ribose) polymerase 1 Source HGNC Symbol Acc HGNC 270
F03	SBH0204919	ENST00000262746.5	PRDX1	ENSG00000117450	peroxiredoxin 1 Source HGNC Symbol Acc HGNC 9352
F04	SBH1220346	ENST00000403059.8	PVR	ENSG00000073008	poliovirus receptor Source HGNC Symbol Acc HGNC 9705
F05	SBH0068778	ENST00000305138.8	RAD17	ENSG00000152942	RAD17 checkpoint clamp loader component Source HGNC Symbol Acc HGNC 9807
F06	SBH1220355	ENST00000423169.6	RAD51	ENSG00000051180	RAD51 recombinase Source HGNC Symbol Acc HGNC 9817
F07	SBH1220357	ENST00000307980.7	RAD9A	ENSG00000172613	RAD9 checkpoint clamp component A Source HGNC Symbol Acc HGNC 9827
F08	SBH1220369	ENST00000259808.9	RIPK1	ENSG00000137275	receptor interacting serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 10019
F09	SBH1220389	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F10	SBH0102394	ENST00000426263.8	SLC2A1	ENSG00000117394	solute carrier family 2 member 1 Source HGNC Symbol Acc HGNC 11005

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220403	ENST00000381151.5	SLC5A3	ENSG00000198743	solute carrier family 5 member 3 Source HGNC Symbol Acc HGNC 11038
F12	SBH0567619	ENST00000466342.1	SQSTM1	ENSG00000161011	sequestosome 1 Source HGNC Symbol Acc HGNC 11280
G01	SBH0092782	ENST00000355622.8	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G02	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G03	SBH1220472	ENST00000221132.7	TNFRSF10A	ENSG00000104689	TNF receptor superfamily member 10a Source HGNC Symbol Acc HGNC 11904
G04	SBH1220473	ENST00000347739.3	TNFRSF10B	ENSG00000120889	TNF receptor superfamily member 10b Source HGNC Symbol Acc HGNC 11905
G05	SBH0080951	ENST00000162749.6	TNFRSF1A	ENSG00000067182	TNF receptor superfamily member 1A Source HGNC Symbol Acc HGNC 11916
G06	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G07	SBH1220497	ENST00000374517.6	TXN	ENSG00000136810	thioredoxin Source HGNC Symbol Acc HGNC 12435
G08	SBH1220498	ENST00000268483.8	TXNL4B	ENSG00000140830	thioredoxin like 4B Source HGNC Symbol Acc HGNC 26041
G09	SBH0296369	ENST00000526691.5	TXNRD1	ENSG00000198431	thioredoxin reductase 1 Source HGNC Symbol Acc HGNC 12437
G10	SBH1220504	ENST00000321867.6	ULK1	ENSG00000177169	unc-51 like autophagy activating kinase 1 Source HGNC Symbol Acc HGNC 12558
G11	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	SBH0219777	ENST00000285021.11	XPC	ENSG00000154767	XPC complex subunit, DNA damage recognition and repair factor Source HGNC Symbol Acc HGNC 12816
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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