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

Human Apoptosis

Cat. no. 249950 SBHS-012ZR

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	ABL1	AIFM1	AKT1	APAF1	BAD	BAG1	BAG3	BAK1	BAX	BCL10	BCL2	BCL2A1
B	BCL2L1	BCL2L10	BCL2L11	BCL2L2	BFAR	BID	BIK	BIRC2	BIRC3	BIRC5	BIRC6	BNIP2
C	BNIP3	BNIP3L	BRAF	CASP1	CASP10	CASP14	CASP2	CASP3	CASP4	CASP5	CASP6	CASP7
D	CASP8	CASP9	CD27	CD40	CD40LG	CD70	CFLAR	CIDEA	CIDEB	CRADD	CYCS	DAPK1
E	DFFA	DIABLO	FADD	FAS	FASLG	GADD45A	HRK	IGF1R	IL10	LTA	LTBR	MCL1
F	NAIP	NFKB1	NOD1	NOL3	PYCARD	RIPK2	TNF	TNFRSF10A	TNFRSF10B	TNFRSF11B	TNFRSF1A	TNFRSF1B
G	TNFRSF21	TNFRSF25	TNFRSF9	TNFSF10	TNFSF8	TP53	TP53BP2	TP73	TRADD	TRAF2	TRAF3	XIAP
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	SBH1219716	ENST00000372348.6	ABL1	ENSG00000097007	ABL proto-oncogene 1, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 76
A02	SBH1219730	ENST00000319908.7	AIFM1	ENSG00000156709	apoptosis inducing factor mitochondria associated 1 Source HGNC Symbol Acc HGNC 8768
A03	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A04	SBH1219745	ENST00000359972.6	APAF1	ENSG00000120868	apoptotic peptidase activating factor 1 Source HGNC Symbol Acc HGNC 576
A05	SBH0034205	ENST00000394532.7	BAD	ENSG00000002330	BCL2 associated agonist of cell death Source HGNC Symbol Acc HGNC 936
A06	SBH1219779	ENST00000379704.7	BAG1	ENSG00000107262	BCL2 associated athanogene 1 Source HGNC Symbol Acc HGNC 937
A07	SBH0474041	ENST00000369085.7	BAG3	ENSG00000151929	BCL2 associated athanogene 3 Source HGNC Symbol Acc HGNC 939
A08	SBH1219780	ENST00000374467.4	BAK1	ENSG00000030110	BCL2 antagonist/killer 1 Source HGNC Symbol Acc HGNC 949
A09	SBH1219783	ENST00000391871.4	BAX	ENSG00000087088	BCL2 associated X, apoptosis regulator Source HGNC Symbol Acc HGNC 959
A10	SBH1219785	ENST00000648566.1	BCL10	ENSG00000142867	BCL10, immune signaling adaptor Source HGNC Symbol Acc HGNC 989
A11	SBH1219786	ENST00000398117.1	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A12	SBH1219787	ENST00000267953.4	BCL2A1	ENSG00000140379	BCL2 related protein A1 Source HGNC Symbol Acc HGNC 991
B01	SBH0216029	ENST00000450273.1	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
B02	SBH1219788	ENST00000260442.3	BCL2L10	ENSG00000137875	BCL2 like 10 Source HGNC Symbol Acc HGNC 993
B03	SBH0393547	ENST00000308659.12	BCL2L11	ENSG00000153094	BCL2 like 11 Source HGNC Symbol Acc HGNC 994
B04	SBH1219789	ENST00000250405.9	BCL2L2	ENSG00000129473	BCL2 like 2 Source HGNC Symbol Acc HGNC 995
B05	SBH1219792	ENST00000261658.7	BFAR	ENSG00000103429	bifunctional apoptosis regulator Source HGNC Symbol Acc HGNC 17613
B06	SBH0641141	ENST00000622694.4	BID	ENSG00000015475	BH3 interacting domain death agonist Source HGNC Symbol Acc HGNC 1050
B07	SBH1219794	ENST00000216115.3	BIK	ENSG00000100290	BCL2 interacting killer Source HGNC Symbol Acc HGNC 1051
B08	SBH1219795	ENST00000530675.5	BIRC2	ENSG00000110330	baculoviral IAP repeat containing 2 Source HGNC Symbol Acc HGNC 590
B09	SBH1219796	ENST00000263464.8	BIRC3	ENSG00000023445	baculoviral IAP repeat containing 3 Source HGNC Symbol Acc HGNC 591
B10	SBH1219797	ENST00000301633.8	BIRC5	ENSG00000089685	baculoviral IAP repeat containing 5 Source HGNC Symbol Acc HGNC 593
B11	SBH1219798	ENST00000648282.1	BIRC6	ENSG00000115760	baculoviral IAP repeat containing 6 Source HGNC Symbol Acc HGNC 13516
B12	SBH1219809	ENST00000267859.7	BNIP2	ENSG00000140299	BCL2 interacting protein 2 Source HGNC Symbol Acc HGNC 1083
C01	SBH1219810	ENST00000540159.3	BNIP3	ENSG00000176171	BCL2 interacting protein 3 Source HGNC Symbol Acc HGNC 1084
C02	SBH1219811	ENST00000523515.5	BNIP3L	ENSG00000104765	BCL2 interacting protein 3 like Source HGNC Symbol Acc HGNC 1085
C03	SBH1219813	ENST00000288602.11	BRAF	ENSG00000157764	B-Raf proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 1097
C04	SBH0054226	ENST00000526568.5	CASP1	ENSG00000137752	caspase 1 Source HGNC Symbol Acc HGNC 1499
C05	SBH1219823	ENST00000286186.10	CASP10	ENSG00000003400	caspase 10 Source HGNC Symbol Acc HGNC 1500
C06	SBH0215726	ENST00000427043.4	CASP14	ENSG00000105141	caspase 14 Source HGNC Symbol Acc HGNC 1502
C07	SBH0250948	ENST00000310447.10	CASP2	ENSG00000106144	caspase 2 Source HGNC Symbol Acc HGNC 1503
C08	SBH1219824	ENST00000308394.9	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
C09	SBH1219825	ENST00000393150.7	CASP4	ENSG00000196954	caspase 4 Source HGNC Symbol Acc HGNC 1505
C10	SBH1219826	ENST00000260315.8	CASP5	ENSG00000137757	caspase 5 Source HGNC Symbol Acc HGNC 1506
		ENST00000352		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1219827	981.7	CASP6	138794	caspase 6 Source HGNC Symbol Acc HGNC 1507
C12	SBH0425413	ENST00000369318.7	CASP7	ENSG00000165806	caspase 7 Source HGNC Symbol Acc HGNC 1508
D01	SBH0075404	ENST00000358485.8	CASP8	ENSG00000064012	caspase 8 Source HGNC Symbol Acc HGNC 1509
D02	SBH1219828	ENST00000333868.10	CASP9	ENSG00000132906	caspase 9 Source HGNC Symbol Acc HGNC 1511
D03	SBH1219859	ENST00000266557.3	CD27	ENSG00000139193	CD27 molecule Source HGNC Symbol Acc HGNC 11922
D04	SBH1219861	ENST00000372285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
D05	SBH1219862	ENST00000370629.6	CD40LG	ENSG00000102245	CD40 ligand Source HGNC Symbol Acc HGNC 11935
D06	SBH1219863	ENST00000245903.4	CD70	ENSG00000125726	CD70 molecule Source NCBI gene Acc 970
D07	SBH1219883	ENST00000462763.5	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
D08	SBH0077531	ENST00000320477.9	CIDEA	ENSG00000176194	cell death inducing DFFA like effector a Source HGNC Symbol Acc HGNC 1976
D09	SBH1219888	ENST00000258807.5	CIDEB	ENSG00000136305	cell death inducing DFFA like effector b Source HGNC Symbol Acc HGNC 1977
D10	SBH1219911	ENST00000552983.5	CRADD	ENSG00000169372	CASP2 and RIPK1 domain containing adaptor with death domain Source HGNC Symbol Acc HGNC 2340
D11	SBH1219937	ENST00000305786.6	CYCS	ENSG00000172115	cytochrome c, somatic Source HGNC Symbol Acc HGNC 19986
D12	SBH1219941	ENST00000408954.8	DAPK1	ENSG00000196730	death associated protein kinase 1 Source HGNC Symbol Acc HGNC 2674
E01	SBH1219946	ENST00000377036.2	DFFA	ENSG00000160049	DNA fragmentation factor subunit alpha Source HGNC Symbol Acc HGNC 2772
E02	SBH1219949	ENST00000464942.7	DIABLO	ENSG00000184047	diablo IAP-binding mitochondrial protein Source HGNC Symbol Acc HGNC 21528
E03	SBH0294674	ENST00000301838.4	FADD	ENSG00000168040	Fas associated via death domain Source HGNC Symbol Acc HGNC 3573
E04	SBH1219994	ENST00000652046.1	FAS	ENSG00000026103	Fas cell surface death receptor Source HGNC Symbol Acc HGNC 11920
E05	SBH1219995	ENST00000367721.3	FASLG	ENSG00000117560	Fas ligand Source HGNC Symbol Acc HGNC 11936
E06	SBH1220019	ENST00000370985.4	GADD45A	ENSG00000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
E07	SBH1220069	ENST00000257572.5	HRK	ENSG00000135116	harakiri, BCL2 interacting protein Source HGNC Symbol Acc HGNC 5185
E08	SBH0201042	ENST00000650285.1	IGF1R	ENSG00000140443	insulin like growth factor 1 receptor Source HGNC Symbol Acc HGNC 5465
E09	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
E10	SBH0249281	ENST00000418386.2	LTA	ENSG00000226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
E11	SBH1220181	ENST00000228918.9	LTBR	ENSG00000111321	lymphotoxin beta receptor Source HGNC Symbol Acc HGNC 6718
E12	SBH1220199	ENST00000620947.4	MCL1	ENSG00000143384	MCL1, BCL2 family apoptosis regulator Source HGNC Symbol Acc HGNC 6943
F01	SBH1220235	ENST00000523981.5	NAIP	ENSG00000249437	NLR family apoptosis inhibitory protein Source HGNC Symbol Acc HGNC 7634
F02	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
F03	SBH1220271	ENST00000222823.9	NOD1	ENSG00000106100	nucleotide binding oligomerization domain containing 1 Source HGNC Symbol Acc HGNC 16390
F04	SBH0116684	ENST00000268605.11	NOL3	ENSG00000140939	nucleolar protein 3 Source NCBI gene Acc 8996
F05	SBH1220348	ENST00000247470.10	PYCARD	ENSG00000103490	PYD and CARD domain containing Source HGNC Symbol Acc HGNC 16608
F06	SBH1220370	ENST00000220751.5	RIPK2	ENSG00000104312	receptor interacting serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 10020
F07	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
F08	SBH1220472	ENST00000221132.7	TNFRSF10A	ENSG00000104689	TNF receptor superfamily member 10a Source HGNC Symbol Acc HGNC 11904
F09	SBH1220473	ENST00000347739.3	TNFRSF10B	ENSG00000120889	TNF receptor superfamily member 10b Source HGNC Symbol Acc HGNC 11905
F10	SBH1220474	ENST00000297350.9	TNFRSF11B	ENSG00000164761	TNF receptor superfamily member 11b Source HGNC Symbol Acc HGNC 11909

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0080951	ENST00000162749.6	TNFRSF1A	ENSG00000067182	TNF receptor superfamily member 1A Source HGNC Symbol Acc HGNC 11916
F12	SBH1220475	ENST00000536782.2	TNFRSF1B	ENSG00000028137	TNF receptor superfamily member 1B Source HGNC Symbol Acc HGNC 11917
G01	SBH0062778	ENST00000296861.2	TNFRSF21	ENSG00000146072	TNF receptor superfamily member 21 Source HGNC Symbol Acc HGNC 13469
G02	SBH0554154	ENST00000377782.7	TNFRSF25	ENSG00000215788	TNF receptor superfamily member 25 Source HGNC Symbol Acc HGNC 11910
G03	SBH1220476	ENST00000377507.7	TNFRSF9	ENSG00000049249	TNF receptor superfamily member 9 Source HGNC Symbol Acc HGNC 11924
G04	SBH1220477	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G05	SBH0593682	ENST00000223795.2	TNFSF8	ENSG00000106952	TNF superfamily member 8 Source HGNC Symbol Acc HGNC 11938
G06	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G07	SBH1220487	ENST00000391878.6	TP53BP2	ENSG00000143514	tumor protein p53 binding protein 2 Source HGNC Symbol Acc HGNC 12000
G08	SBH1220488	ENST00000346387.8	TP73	ENSG00000078900	tumor protein p73 Source HGNC Symbol Acc HGNC 12003
G09	SBH1220491	ENST00000345057.9	TRADD	ENSG00000102871	TNFRSF1A associated via death domain Source HGNC Symbol Acc HGNC 12030
G10	SBH1220492	ENST00000247668.7	TRAF2	ENSG00000127191	TNF receptor associated factor 2 Source HGNC Symbol Acc HGNC 12032
G11	SBH0271159	ENST00000560371.5	TRAF3	ENSG00000131323	TNF receptor associated factor 3 Source HGNC Symbol Acc HGNC 12033
G12	SBH1220539	ENST00000434753.7	XIAP	ENSG00000101966	X-linked inhibitor of apoptosis Source HGNC Symbol Acc HGNC 592
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.

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.