

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

Human Cell Cycle

Cat. no. 249950 SBHS-020ZR

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	ANAPC2	ATM	ATR	AURKA	AURKB	BCCIP	BCL2	BIRC5	BRCA1	BRCA2	CASP3
B	CCNA2	CCNB1	CCNB2	CCNC	CCND1	CCND2	CCND3	CCNE1	CCNF	CCNG1	CCNG2	CCNH
C	CCNT1	CDC16	CDC20	CDC25A	CDC25C	CDC34	CDC6	CDK1	CDK2	CDK4	CDK5R1	CDK5RAP1
D	CDK6	CDK7	CDK8	CDKN1A	CDKN1B	CDKN2A	CDKN2B	CDKN3	CHEK1	CHEK2	CKS1B	CKS2
E	CUL1	CUL2	CUL3	E2F1	E2F4	GADD45A	GTSE1	HUS1	KNTC1	KPNA2	MAD2L1	MAD2L2
F	MCM2	MCM3	MCM4	MCM5	MDM2	MKI67	MNAT1	MRE11	NBN	RAD1	RAD17	RAD51
G	RAD9A	RB1	RBBP8	RBL1	RBL2	SERTAD1	SKP2	STMN1	TFDP1	TFDP2	TP53	WEE1
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	SBH0614380	ENST00000495611.1	ANAPC2	ENSG00000176248	anaphase promoting complex subunit 2 Source HGNC Symbol Acc HGNC 19989
A03	SBH1219763	ENST00000452508.6	ATM	ENSG00000149311	ATM serine/threonine kinase Source HGNC Symbol Acc HGNC 795
A04	SBH1219775	ENST00000350721.9	ATR	ENSG00000175054	ATR serine/threonine kinase Source HGNC Symbol Acc HGNC 882
A05	SBH0360632	ENST00000441357.5	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
A06	SBH0250324	ENST00000580998.5	AURKB	ENSG00000178999	aurora kinase B Source HGNC Symbol Acc HGNC 11390
A07	SBH0314938	ENST00000299130.7	BCCIP	ENSG00000107949	BRCA2 and CDKN1A interacting protein Source HGNC Symbol Acc HGNC 978
A08	SBH1219786	ENST00000398117.1	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A09	SBH1219797	ENST00000301633.8	BIRC5	ENSG00000089685	baculoviral IAP repeat containing 5 Source HGNC Symbol Acc HGNC 593
A10	SBH1219814	ENST00000357654.8	BRCA1	ENSG000000102048	BRCA1, DNA repair associated Source HGNC Symbol Acc HGNC 1100
A11	SBH1219815	ENST00000380152.7	BRCA2	ENSG00000139618	BRCA2, DNA repair associated Source HGNC Symbol Acc HGNC 1101
A12	SBH1219824	ENST00000308394.9	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
B01	SBH0652713	ENST00000274026.10	CCNA2	ENSG00000145386	cyclin A2 Source HGNC Symbol Acc HGNC 1578
B02	SBH1219842	ENST00000256442.10	CCNB1	ENSG00000134057	cyclin B1 Source HGNC Symbol Acc HGNC 1579
B03	SBH1219843	ENST00000621385.1	CCNB2	ENSG00000157456	cyclin B2 Source HGNC Symbol Acc HGNC 1580
B04	SBH1219844	ENST00000524049.5	CCNC	ENSG00000112237	cyclin C Source HGNC Symbol Acc HGNC 1581
B05	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B06	SBH1219845	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B07	SBH0542733	ENST00000372991.8	CCND3	ENSG00000112576	cyclin D3 Source HGNC Symbol Acc HGNC 1585
B08	SBH1219846	ENST00000262643.8	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
B09	SBH0035824	ENST00000564236.1	CCNF	ENSG00000162063	cyclin F Source HGNC Symbol Acc HGNC 1591
B10	SBH1219847	ENST00000393929.5	CCNG1	ENSG00000113328	cyclin G1 Source HGNC Symbol Acc HGNC 1592
B11	SBH1219848	ENST00000512918.5	CCNG2	ENSG00000138764	cyclin G2 Source HGNC Symbol Acc HGNC 1593
B12	SBH1219849	ENST00000504878.1	CCNH	ENSG00000134480	cyclin H Source HGNC Symbol Acc HGNC 1594
C01	SBH1219850	ENST00000261900.8	CCNT1	ENSG00000129315	cyclin T1 Source HGNC Symbol Acc HGNC 1599
C02	SBH0344781	ENST00000650489.1	CDC16	ENSG00000130177	cell division cycle 16 Source HGNC Symbol Acc HGNC 1720
C03	SBH1219865	ENST00000310955.11	CDC20	ENSG00000117399	cell division cycle 20 Source HGNC Symbol Acc HGNC 1723
C04	SBH0437013	ENST00000302506.7	CDC25A	ENSG00000164045	cell division cycle 25A Source HGNC Symbol Acc HGNC 1725
C05	SBH1219866	ENST00000514017.1	CDC25C	ENSG00000158402	cell division cycle 25C Source HGNC Symbol Acc HGNC 1727
C06	SBH1219867	ENST00000586283.6	CDC34	ENSG00000099804	cell division cycle 34 Source HGNC Symbol Acc HGNC 1734
C07	SBH1219868	ENST00000209728.9	CDC6	ENSG00000094804	cell division cycle 6 Source HGNC Symbol Acc HGNC 1744
C08	SBH0229893	ENST00000395284.7	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
C09	SBH1219872	ENST00000553376.5	CDK2	ENSG00000123374	cyclin dependent kinase 2 Source HGNC Symbol Acc HGNC 1771
C10	SBH1219873	ENST00000547281.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
		ENST00000313		ENSG000000	cyclin dependent kinase 5 regulatory subunit 1 Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1219874	401.4	CDK5R1	176749	HGNC 1775
C12	SBH1219875	ENST00000357886.8	CDK5RAP1	ENSG00000101391	CDK5 regulatory subunit associated protein 1 Source HGNC Symbol Acc HGNC 15880
D01	SBH1219876	ENST00000424848.2	CDK6	ENSG00000105810	cyclin dependent kinase 6 Source HGNC Symbol Acc HGNC 1777
D02	SBH1219877	ENST00000256443.8	CDK7	ENSG00000134058	cyclin dependent kinase 7 Source HGNC Symbol Acc HGNC 1778
D03	SBH1219878	ENST00000381527.8	CDK8	ENSG00000132964	cyclin dependent kinase 8 Source HGNC Symbol Acc HGNC 1779
D04	SBH0608500	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
D05	SBH1219879	ENST00000442489.1	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
D06	SBH0349548	ENST00000304494.9	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
D07	SBH1219880	ENST00000276925.7	CDKN2B	ENSG00000147883	cyclin dependent kinase inhibitor 2B Source HGNC Symbol Acc HGNC 1788
D08	SBH1219881	ENST00000458126.6	CDKN3	ENSG00000100526	cyclin dependent kinase inhibitor 3 Source HGNC Symbol Acc HGNC 1791
D09	SBH1219885	ENST00000534070.5	CHEK1	ENSG00000149554	checkpoint kinase 1 Source HGNC Symbol Acc HGNC 1925
D10	SBH0661120	ENST00000416671.5	CHEK2	ENSG00000183765	checkpoint kinase 2 Source HGNC Symbol Acc HGNC 16627
D11	SBH1219890	ENST00000368436.1	CKS1B	ENSG00000173207	CDC28 protein kinase regulatory subunit 1B Source HGNC Symbol Acc HGNC 19083
D12	SBH0514674	ENST00000314355.7	CKS2	ENSG00000123975	CDC28 protein kinase regulatory subunit 2 Source HGNC Symbol Acc HGNC 2000
E01	SBH1219924	ENST00000409469.5	CUL1	ENSG00000055130	cullin 1 Source HGNC Symbol Acc HGNC 2551
E02	SBH1219925	ENST00000374751.7	CUL2	ENSG00000108094	cullin 2 Source HGNC Symbol Acc HGNC 2552
E03	SBH0471279	ENST00000344951.8	CUL3	ENSG00000036257	cullin 3 Source HGNC Symbol Acc HGNC 2553
E04	SBH1219965	ENST00000343380.6	E2F1	ENSG00000101412	E2F transcription factor 1 Source HGNC Symbol Acc HGNC 3113
E05	SBH1219966	ENST00000379378.8	E2F4	ENSG00000205250	E2F transcription factor 4 Source HGNC Symbol Acc HGNC 3118
E06	SBH1220019	ENST00000370985.4	GADD45A	ENSG00000116717	growth arrest and DNA damage inducible alpha Source HGNC Symbol Acc HGNC 4095
E07	SBH1220044	ENST00000454366.2	GTSE1	ENSG00000075218	G2 and S-phase expressed 1 Source HGNC Symbol Acc HGNC 13698
E08	SBH1220075	ENST00000432627.5	HUS1	ENSG00000136273	HUS1 checkpoint clamp component Source HGNC Symbol Acc HGNC 5309
E09	SBH1220155	ENST00000333479.12	KNTC1	ENSG00000184445	kinetochore associated 1 Source HGNC Symbol Acc HGNC 17255
E10	SBH1220156	ENST00000579754.1	KPNA2	ENSG00000182481	karyopherin subunit alpha 2 Source HGNC Symbol Acc HGNC 6395
E11	SBH1220185	ENST00000296509.11	MAD2L1	ENSG00000164109	mitotic arrest deficient 2 like 1 Source HGNC Symbol Acc HGNC 6763
E12	SBH0400477	ENST00000456915.1	MAD2L2	ENSG00000116670	mitotic arrest deficient 2 like 2 Source HGNC Symbol Acc HGNC 6764
F01	SBH1220200	ENST00000491422.1	MCM2	ENSG00000073111	minichromosome maintenance complex component 2 Source HGNC Symbol Acc HGNC 6944
F02	SBH1220201	ENST00000596288.6	MCM3	ENSG00000112118	minichromosome maintenance complex component 3 Source HGNC Symbol Acc HGNC 6945
F03	SBH0233883	ENST00000262105.6	MCM4	ENSG00000104738	minichromosome maintenance complex component 4 Source HGNC Symbol Acc HGNC 6947
F04	SBH1220202	ENST00000416905.1	MCM5	ENSG00000100297	minichromosome maintenance complex component 5 Source HGNC Symbol Acc HGNC 6948
F05	SBH1220207	ENST00000523991.5	MDM2	ENSG00000135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
F06	SBH1220213	ENST00000368654.8	MKI67	ENSG00000148773	marker of proliferation Ki-67 Source HGNC Symbol Acc HGNC 7107
F07	SBH1220226	ENST00000557134.1	MNAT1	ENSG00000020426	MNAT1, CDK activating kinase assembly factor Source HGNC Symbol Acc HGNC 7181
F08	SBH0627154	ENST00000323977.7	MRE11	ENSG00000020922	MRE11 homolog, double strand break repair nuclease Source HGNC Symbol Acc HGNC 7230
F09	SBH0220644	ENST00000265433.7	NBN	ENSG00000104320	nibrin Source HGNC Symbol Acc HGNC 7652
F10	SBH0532031	ENST00000325577.8	RAD1	ENSG00000113456	RAD1 checkpoint DNA exonuclease Source HGNC Symbol Acc HGNC 9806

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0068778	ENST00000305138.8	RAD17	ENSG00000152942	RAD17 checkpoint clamp loader component Source HGNC Symbol Acc HGNC 9807
F12	SBH1220355	ENST00000423169.6	RAD51	ENSG00000051180	RAD51 recombinase Source HGNC Symbol Acc HGNC 9817
G01	SBH1220357	ENST00000307980.7	RAD9A	ENSG00000172613	RAD9 checkpoint clamp component A Source HGNC Symbol Acc HGNC 9827
G02	SBH0093533	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
G03	SBH1220358	ENST00000582354.5	RBBP8	ENSG00000101773	RB binding protein 8, endonuclease Source HGNC Symbol Acc HGNC 9891
G04	SBH1220360	ENST00000334359.7	RBL1	ENSG00000080839	RB transcriptional corepressor like 1 Source HGNC Symbol Acc HGNC 9893
G05	SBH1220361	ENST00000262133.11	RBL2	ENSG00000103479	RB transcriptional corepressor like 2 Source HGNC Symbol Acc HGNC 9894
G06	SBH1220391	ENST00000357949.5	SERTAD1	ENSG00000197019	SERTA domain containing 1 Source HGNC Symbol Acc HGNC 17932
G07	SBH1220400	ENST00000274254.9	SKP2	ENSG00000145604	S-phase kinase associated protein 2 Source HGNC Symbol Acc HGNC 10901
G08	SBH1220427	ENST00000426559.6	STMN1	ENSG00000117632	stathmin 1 Source HGNC Symbol Acc HGNC 6510
G09	SBH1220440	ENST00000375370.10	TFDP1	ENSG00000198176	transcription factor Dp-1 Source HGNC Symbol Acc HGNC 11749
G10	SBH0244904	ENST00000486111.5	TFDP2	ENSG00000114126	transcription factor Dp-2 Source HGNC Symbol Acc HGNC 11751
G11	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G12	SBH1220523	ENST00000450114.7	WEE1	ENSG00000166483	WEE1 G2 checkpoint kinase Source HGNC Symbol Acc HGNC 12761
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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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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