QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Human Cancer Drug Targets

Cat. no. 249950 SBHS-507ZA

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 (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	ABCC1	AKT1	AKT2	ATF2	AURKA	AURKB	AURKC	BCL2	BIRC5	CDC25A	CDK1	CDK2
B	CDK4	CDK5	CDK7	CDK8	CDK9	CTSB	CTSD	CTSL	CTSS	EGFR	ERBB2	ERBB3
C	ERBB4	ESR1	ESR2	VEGFD	FLT1	FLT4	GRB2	GSTP1	HDAC1	HDAC11	HDAC2	HDAC3
D	HDAC4	HDAC6	HDAC7	HDAC8	HIF1A	HRAS	HSP90AA1	HSP90B1	IGF1	IGF1R	IGF2	IRF5
E	KDR	KIT	KRAS	MDM2	MDM4	MTOR	NFKB1	NRAS	NTN3	PARP1	PARP2	PARP4
F	PDGFRA	PDGFRB	PGR	PIK3C2A	PIK3C3	PIK3CA	PLK1	PLK2	PLK3	PLK4	PRKCA	PRKCB
G	PRKCD	PRKCE	PTGS2	RHOA	RHOB	TERT	TNKS	TOP2A	TOP2B	TP53	TXN	TXNRD1
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	SBH0544598	ENST00000575422.5	ABCC1	ENSG00000103222	ATP binding cassette subfamily C member 1 Source HGNC Symbol Acc HGNC 51
A02	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	SBH0364428	ENST00000492463.6	AKT2	ENSG00000105221	AKT serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 392
A04	SBH1219753	ENST00000409833.5	ATF2	ENSG00000115966	activating transcription factor 2 Source HGNC Symbol Acc HGNC 784
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	SBH0371600	ENST00000598785.5	AURKC	ENSG00000105146	aurora kinase C Source HGNC Symbol Acc HGNC 11391
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	SBH0437013	ENST00000302506.7	CDC25A	ENSG00000164045	cell division cycle 25A Source HGNC Symbol Acc HGNC 1725
A11	SBH0229893	ENST00000395284.7	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
A12	SBH1219872	ENST00000553376.5	CDK2	ENSG00000123374	cyclin dependent kinase 2 Source HGNC Symbol Acc HGNC 1771
B01	SBH1219873	ENST00000547281.5	CDK4	ENSG00000135446	cyclin dependent kinase 4 Source HGNC Symbol Acc HGNC 1773
B02	SBH0103479	ENST00000485972.6	CDK5	ENSG00000164885	cyclin dependent kinase 5 Source HGNC Symbol Acc HGNC 1774
B03	SBH1219877	ENST00000256443.8	CDK7	ENSG00000134058	cyclin dependent kinase 7 Source HGNC Symbol Acc HGNC 1778
B04	SBH1219878	ENST00000381527.8	CDK8	ENSG00000132964	cyclin dependent kinase 8 Source HGNC Symbol Acc HGNC 1779
B05	SBH0632757	ENST00000421939.5	CDK9	ENSG00000136807	cyclin dependent kinase 9 Source HGNC Symbol Acc HGNC 1780
B06	SBH1219921	ENST00000534510.5	CTSB	ENSG00000164733	cathepsin B Source HGNC Symbol Acc HGNC 2527
B07	SBH1219922	ENST00000637815.1	CTSD	ENSG00000117984	cathepsin D Source HGNC Symbol Acc HGNC 2529
B08	SBH0633657	ENST00000340342.10	CTSL	ENSG00000135047	cathepsin L Source HGNC Symbol Acc HGNC 2537
B09	SBH1219923	ENST00000448301.6	CTSS	ENSG00000163131	cathepsin S Source HGNC Symbol Acc HGNC 2545
B10	SBH1219970	ENST00000454757.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
B11	SBH0056013	ENST00000269571.9	ERBB2	ENSG00000141736	erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430
B12	SBH1219981	ENST00000549832.1	ERBB3	ENSG00000065361	erb-b2 receptor tyrosine kinase 3 Source HGNC Symbol Acc HGNC 3431
C01	SBH0602730	ENST00000484594.5	ERBB4	ENSG00000178568	erb-b2 receptor tyrosine kinase 4 Source HGNC Symbol Acc HGNC 3432
C02	SBH0125383	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
C03	SBH0203246	ENST00000554572.5	ESR2	ENSG00000140009	estrogen receptor 2 Source HGNC Symbol Acc HGNC 3468
C04	SBH1220001	ENST00000297904.4	VEGFD	ENSG00000165197	vascular endothelial growth factor D Source HGNC Symbol Acc HGNC 3708
C05	SBH1220002	ENST00000282397.9	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
C06	SBH0243959	ENST00000512795.1	FLT4	ENSG00000037280	fms related tyrosine kinase 4 Source HGNC Symbol Acc HGNC 3767
C07	SBH1220038	ENST00000392563.5	GRB2	ENSG00000177885	growth factor receptor bound protein 2 Source HGNC Symbol Acc HGNC 4566
C08	SBH1220043	ENST00000642444.1	GSTP1	ENSG00000084207	glutathione S-transferase pi 1 Source HGNC Symbol Acc HGNC 4638
C09	SBH0527067	ENST00000472928.5	HDAC1	ENSG00000116478	histone deacetylase 1 Source HGNC Symbol Acc HGNC 4852
C10	SBH1220049	ENST00000437379.2	HDAC11	ENSG00000163517	histone deacetylase 11 Source HGNC Symbol Acc HGNC 19086
		ENST00000519		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220050	108.5	HDAC2	196591	histone deacetylase 2 Source HGNC Symbol Acc HGNC 4853
C12	SBH1220051	ENST00000305264.8	HDAC3	ENSG00000171720	histone deacetylase 3 Source HGNC Symbol Acc HGNC 4854
D01	SBH0538846	ENST00000345617.7	HDAC4	ENSG00000068024	histone deacetylase 4 Source HGNC Symbol Acc HGNC 14063
D02	SBH0370702	ENST00000334136.10	HDAC6	ENSG00000094631	histone deacetylase 6 Source HGNC Symbol Acc HGNC 14064
D03	SBH0071727	ENST00000354334.7	HDAC7	ENSG00000061273	histone deacetylase 7 Source HGNC Symbol Acc HGNC 14067
D04	SBH1220052	ENST00000649752.1	HDAC8	ENSG00000147099	histone deacetylase 8 Source HGNC Symbol Acc HGNC 13315
D05	SBH1220060	ENST00000323441.10	HIF1A	ENSG00000100644	hypoxia inducible factor 1 subunit alpha Source HGNC Symbol Acc HGNC 4910
D06	SBH0257285	ENST00000493230.5	HRAS	ENSG00000174775	HRas proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 5173
D07	SBH0323386	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
D08	SBH1220070	ENST00000299767.10	HSP90B1	ENSG00000166598	heat shock protein 90 beta family member 1 Source HGNC Symbol Acc HGNC 12028
D09	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D10	SBH0201042	ENST00000650285.1	IGF1R	ENSG00000140443	insulin like growth factor 1 receptor Source HGNC Symbol Acc HGNC 5465
D11	SBH0264962	ENST00000418738.2	IGF2	ENSG00000167244	insulin like growth factor 2 Source HGNC Symbol Acc HGNC 5466
D12	SBH1220125	ENST00000357234.10	IRF5	ENSG00000128604	interferon regulatory factor 5 Source HGNC Symbol Acc HGNC 6120
E01	SBH0020198	ENST00000263923.5	KDR	ENSG00000128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
E02	SBH0452028	ENST00000288135.5	KIT	ENSG00000157404	KIT proto-oncogene receptor tyrosine kinase Source HGNC Symbol Acc HGNC 6342
E03	SBH0300474	ENST00000556131.1	KRAS	ENSG00000133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
E04	SBH1220207	ENST00000523991.5	MDM2	ENSG00000135679	MDM2 proto-oncogene Source HGNC Symbol Acc HGNC 6973
E05	SBH0425522	ENST00000463049.5	MDM4	ENSG00000198625	MDM4, p53 regulator Source HGNC Symbol Acc HGNC 6974
E06	SBH0492696	ENST00000361445.8	MTOR	ENSG00000198793	mechanistic target of rapamycin kinase Source HGNC Symbol Acc HGNC 3942
E07	SBH1220264	ENST00000651197.1	NFKB1	ENSG00000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E08	SBH0148098	ENST00000369535.5	NRAS	ENSG00000213281	NRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 7989
E09	SBH0600101	ENST00000293973.1	NTN3	ENSG00000162068	netrin 3 Source HGNC Symbol Acc HGNC 8030
E10	SBH1220289	ENST00000366794.10	PARP1	ENSG00000143799	poly(ADP-ribose) polymerase 1 Source HGNC Symbol Acc HGNC 270
E11	SBH0568522	ENST00000250416.9	PARP2	ENSG00000129484	poly(ADP-ribose) polymerase 2 Source HGNC Symbol Acc HGNC 272
E12	SBH0218401	ENST00000480576.1	PARP4	ENSG00000102699	poly(ADP-ribose) polymerase family member 4 Source HGNC Symbol Acc HGNC 271
F01	SBH1220292	ENST00000257290.10	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
F02	SBH1220293	ENST00000261799.9	PDGFRB	ENSG00000113721	platelet derived growth factor receptor beta Source HGNC Symbol Acc HGNC 8804
F03	SBH0508179	ENST00000534780.5	PGR	ENSG00000082175	progesterone receptor Source HGNC Symbol Acc HGNC 8910
F04	SBH0304342	ENST00000531428.1	PIK3C2A	ENSG00000011405	phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha Source HGNC Symbol Acc HGNC 8971
F05	SBH1220312	ENST00000639914.1	PIK3C3	ENSG00000078142	phosphatidylinositol 3-kinase catalytic subunit type 3 Source HGNC Symbol Acc HGNC 8974
F06	SBH0121428	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
F07	SBH0192284	ENST00000562272.5	PLK1	ENSG00000166851	polo like kinase 1 Source HGNC Symbol Acc HGNC 9077
F08	SBH0057976	ENST00000509555.5	PLK2	ENSG00000145632	polo like kinase 2 Source HGNC Symbol Acc HGNC 19699
F09	SBH0295934	ENST00000476731.1	PLK3	ENSG00000173846	polo like kinase 3 Source HGNC Symbol Acc HGNC 2154
F10	SBH0323748	ENST00000270861.10	PLK4	ENSG00000142731	polo like kinase 4 Source HGNC Symbol Acc HGNC 11397

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0105563	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F12	SBH0521170	ENST00000472066.1	PRKCB	ENSG00000166501	protein kinase C beta Source HGNC Symbol Acc HGNC 9395
G01	SBH0285878	ENST00000652449.1	PRKCD	ENSG00000163932	protein kinase C delta Source HGNC Symbol Acc HGNC 9399
G02	SBH0647980	ENST00000480453.5	PRKCE	ENSG00000171132	protein kinase C epsilon Source HGNC Symbol Acc HGNC 9401
G03	SBH1220344	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
G04	SBH1220367	ENST00000418115.6	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
G05	SBH0318552	ENST00000272233.5	RHOB	ENSG00000143878	ras homolog family member B Source HGNC Symbol Acc HGNC 668
G06	SBH0606096	ENST00000334602.10	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G07	SBH1220482	ENST00000310430.11	TNKS	ENSG00000173273	tankyrase Source HGNC Symbol Acc HGNC 11941
G08	SBH0186927	ENST00000578412.1	TOP2A	ENSG00000131747	DNA topoisomerase II alpha Source HGNC Symbol Acc HGNC 11989
G09	SBH1220485	ENST00000424225.1	TOP2B	ENSG00000077097	DNA topoisomerase II beta Source HGNC Symbol Acc HGNC 11990
G10	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G11	SBH1220497	ENST00000374517.6	TXN	ENSG00000136810	thioredoxin Source HGNC Symbol Acc HGNC 12435
G12	SBH0296369	ENST00000526691.5	TXNRD1	ENSG00000198431	thioredoxin reductase 1 Source HGNC Symbol Acc HGNC 12437
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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