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

Human Stem Cell Signaling

Cat. no. 249950 SBHS-047ZA

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	ACVR1	ACVR1B	ACVR1C	ACVR2A	ACVR2B	ACVRL1	AMHR2	BCL9	BCL9L	BMPR1A	BMPR1B	BMPR2
B	CDX2	CREBBP	CTNNB1	E2F5	ENG	EP300	FGFR1	FGFR2	FGFR3	FGFR4	FZD1	FZD2
C	FZD3	FZD4	FZD5	FZD6	FZD7	FZD8	FZD9	GLI1	GLI2	GLI3	IL6ST	LEF1
D	LIFR	LRP5	LRP6	LTBP1	LTBP2	LTBP3	LTBP4	NCSTN	NFAT5	NFATC1	NFATC2	NFATC3
E	NFATC4	NOTCH1	NOTCH2	NOTCH3	NOTCH4	PSEN1	PSEN2	PSENEN	PTCH1	DISP3	PYGO2	RBL1
F	RBL2	RBPJL	RGMA	SMAD1	SMAD2	SMAD3	SMAD4	SMAD5	SMAD6	SMAD7	SMAD9	SMO
G	SP1	STAT3	SUFU	TCF7	TCF7L1	TCF7L2	TGFBR1	TGFBR2	TGFBR3	TGFBRAP1	VANGL2	ZEB2
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	SBH0054194	ENST00000263640.7	ACVR1	ENSG00000115170	activin A receptor type 1 Source HGNC Symbol Acc HGNC 171
A02	SBH0127507	ENST00000563121.1	ACVR1B	ENSG00000135503	activin A receptor type 1B Source HGNC Symbol Acc HGNC 172
A03	SBH0659944	ENST00000348328.9	ACVR1C	ENSG00000123612	activin A receptor type 1C Source HGNC Symbol Acc HGNC 18123
A04	SBH1219722	ENST00000404590.1	ACVR2A	ENSG00000121989	activin A receptor type 2A Source HGNC Symbol Acc HGNC 173
A05	SBH0139190	ENST00000465020.5	ACVR2B	ENSG00000114739	activin A receptor type 2B Source HGNC Symbol Acc HGNC 174
A06	SBH0294610	ENST00000388922.8	ACVRL1	ENSG00000139567	activin A receptor like type 1 Source HGNC Symbol Acc HGNC 175
A07	SBH1219738	ENST00000550311.5	AMHR2	ENSG00000135409	anti-Mullerian hormone receptor type 2 Source HGNC Symbol Acc HGNC 465
A08	SBH1219791	ENST00000234739.8	BCL9	ENSG00000116128	BCL9, transcription coactivator Source HGNC Symbol Acc HGNC 1008
A09	SBH0382075	ENST00000526143.2	BCL9L	ENSG00000186174	BCL9 like Source HGNC Symbol Acc HGNC 23688
A10	SBH1219807	ENST00000372037.7	BMPR1A	ENSG00000107779	bone morphogenetic protein receptor type 1A Source HGNC Symbol Acc HGNC 1076
A11	SBH0153062	ENST00000515059.5	BMPR1B	ENSG00000138696	bone morphogenetic protein receptor type 1B Source HGNC Symbol Acc HGNC 1077
A12	SBH1219808	ENST00000638587.1	BMPR2	ENSG00000204217	bone morphogenetic protein receptor type 2 Source HGNC Symbol Acc HGNC 1078
B01	SBH0146515	ENST00000548877.1	CDX2	ENSG00000165556	caudal type homeobox 2 Source HGNC Symbol Acc HGNC 1806
B02	SBH0411189	ENST00000571826.5	CREBBP	ENSG00000005339	CREB binding protein Source HGNC Symbol Acc HGNC 2348
B03	SBH0588482	ENST00000396183.7	CTNNB1	ENSG00000168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
B04	SBH0454183	ENST00000518234.5	E2F5	ENSG00000133740	E2F transcription factor 5 Source HGNC Symbol Acc HGNC 3119
B05	SBH1219975	ENST00000480266.5	ENG	ENSG00000106991	endoglin Source HGNC Symbol Acc HGNC 3349
B06	SBH1219977	ENST00000263253.9	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
B07	SBH0226356	ENST00000326324.10	FGFR1	ENSG00000077782	fibroblast growth factor receptor 1 Source HGNC Symbol Acc HGNC 3688
B08	SBH0451647	ENST00000369059.5	FGFR2	ENSG00000066468	fibroblast growth factor receptor 2 Source HGNC Symbol Acc HGNC 3689
B09	SBH0188030	ENST00000440486.7	FGFR3	ENSG00000068078	fibroblast growth factor receptor 3 Source HGNC Symbol Acc HGNC 3690
B10	SBH0523576	ENST00000509511.5	FGFR4	ENSG00000160867	fibroblast growth factor receptor 4 Source HGNC Symbol Acc HGNC 3691
B11	SBH0084545	ENST00000287934.3	FZD1	ENSG00000157240	frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038
B12	SBH0574916	ENST00000315323.4	FZD2	ENSG00000180340	frizzled class receptor 2 Source HGNC Symbol Acc HGNC 4040
C01	SBH1220011	ENST00000240093.8	FZD3	ENSG00000104290	frizzled class receptor 3 Source HGNC Symbol Acc HGNC 4041
C02	SBH1220012	ENST00000531380.2	FZD4	ENSG00000174804	frizzled class receptor 4 Source HGNC Symbol Acc HGNC 4042
C03	SBH1220013	ENST00000295417.4	FZD5	ENSG00000163251	frizzled class receptor 5 Source HGNC Symbol Acc HGNC 4043
C04	SBH1220014	ENST00000522566.5	FZD6	ENSG00000164930	frizzled class receptor 6 Source HGNC Symbol Acc HGNC 4044
C05	SBH0357958	ENST00000286201.2	FZD7	ENSG00000155760	frizzled class receptor 7 Source HGNC Symbol Acc HGNC 4045
C06	SBH0414193	ENST00000374694.2	FZD8	ENSG00000177283	frizzled class receptor 8 Source HGNC Symbol Acc HGNC 4046
C07	SBH0166208	ENST00000344575.4	FZD9	ENSG00000188763	frizzled class receptor 9 Source HGNC Symbol Acc HGNC 4047
C08	SBH0169622	ENST00000528467.1	GLI1	ENSG00000111087	GLI family zinc finger 1 Source HGNC Symbol Acc HGNC 4317
C09	SBH0023726	ENST00000452692.5	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
C10	SBH0142624	ENST00000448703.5	GLI3	ENSG00000106571	GLI family zinc finger 3 Source HGNC Symbol Acc HGNC 4319
		ENST00000503		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0280973	773.6	IL6ST	134352	interleukin 6 signal transducer Source HGNC Symbol Acc HGNC 6021
C12	SBH1220167	ENST00000265165.6	LEF1	ENSG00000138795	lymphoid enhancer binding factor 1 Source HGNC Symbol Acc HGNC 6551
D01	SBH0373775	ENST00000506990.5	LIFR	ENSG00000113594	LIF receptor alpha Source HGNC Symbol Acc HGNC 6597
D02	SBH1220177	ENST00000294304.12	LRP5	ENSG00000162337	LDL receptor related protein 5 Source HGNC Symbol Acc HGNC 6697
D03	SBH1220178	ENST00000261349.9	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
D04	SBH1220179	ENST00000407925.5	LTBP1	ENSG00000049323	latent transforming growth factor beta binding protein 1 Source HGNC Symbol Acc HGNC 6714
D05	SBH1220180	ENST00000556690.5	LTBP2	ENSG00000119681	latent transforming growth factor beta binding protein 2 Source HGNC Symbol Acc HGNC 6715
D06	SBH0671030	ENST00000301873.9	LTBP3	ENSG00000168056	latent transforming growth factor beta binding protein 3 Source HGNC Symbol Acc HGNC 6716
D07	SBH0371009	ENST00000243562.13	LTBP4	ENSG00000090006	latent transforming growth factor beta binding protein 4 Source HGNC Symbol Acc HGNC 6717
D08	SBH0547598	ENST00000437169.5	NCSTN	ENSG00000162736	nicastrin Source HGNC Symbol Acc HGNC 17091
D09	SBH1220263	ENST00000354436.6	NFAT5	ENSG00000102908	nuclear factor of activated T cells 5 Source HGNC Symbol Acc HGNC 7774
D10	SBH0171265	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
D11	SBH0361870	ENST00000609943.5	NFATC2	ENSG00000101096	nuclear factor of activated T cells 2 Source HGNC Symbol Acc HGNC 7776
D12	SBH0604923	ENST00000562171.1	NFATC3	ENSG00000072736	nuclear factor of activated T cells 3 Source HGNC Symbol Acc HGNC 7777
E01	SBH0453720	ENST00000557451.5	NFATC4	ENSG00000100968	nuclear factor of activated T cells 4 Source HGNC Symbol Acc HGNC 7778
E02	SBH0615258	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
E03	SBH0378554	ENST00000256646.7	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E04	SBH0513117	ENST00000597756.1	NOTCH3	ENSG00000074181	notch 3 Source HGNC Symbol Acc HGNC 7883
E05	SBH1220273	ENST00000375023.3	NOTCH4	ENSG00000204301	notch 4 Source HGNC Symbol Acc HGNC 7884
E06	SBH0137526	ENST00000557511.5	PSEN1	ENSG00000080815	presenilin 1 Source HGNC Symbol Acc HGNC 9508
E07	SBH0022194	ENST00000521431.1	PSEN2	ENSG00000143801	presenilin 2 Source HGNC Symbol Acc HGNC 9509
E08	SBH0591590	ENST00000222266.2	PSENEN	ENSG00000205155	presenilin enhancer, gamma-secretase subunit Source HGNC Symbol Acc HGNC 30100
E09	SBH0360047	ENST00000331920.10	PTCH1	ENSG00000185920	patched 1 Source HGNC Symbol Acc HGNC 9585
E10	SBH0067348	ENST00000294484.7	DISP3	ENSG00000204624	dispatched RND transporter family member 3 Source HGNC Symbol Acc HGNC 29251
E11	SBH0562823	ENST00000483463.1	PYGO2	ENSG00000163348	pygopus family PHD finger 2 Source HGNC Symbol Acc HGNC 30257
E12	SBH1220360	ENST00000344359.7	RBL1	ENSG00000080839	RB transcriptional corepressor like 1 Source HGNC Symbol Acc HGNC 9893
F01	SBH1220361	ENST00000262133.11	RBL2	ENSG00000103479	RB transcriptional corepressor like 2 Source HGNC Symbol Acc HGNC 9894
F02	SBH0096114	ENST00000372741.7	RBPJL	ENSG00000124232	recombination signal binding protein for immunoglobulin kappa J region like Source HGNC Symbol Acc HGNC 13761
F03	SBH0450846	ENST00000542321.6	RGMA	ENSG00000182175	repulsive guidance molecule BMP co-receptor a Source HGNC Symbol Acc HGNC 30308
F04	SBH1220404	ENST00000394092.6	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F05	SBH1220405	ENST00000262160.11	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F06	SBH0216540	ENST00000558428.5	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
F07	SBH1220406	ENST00000588745.5	SMAD4	ENSG00000141646	SMAD family member 4 Source HGNC Symbol Acc HGNC 6770
F08	SBH1220407	ENST00000545279.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
F09	SBH1220408	ENST00000558937.1	SMAD6	ENSG00000137834	SMAD family member 6 Source HGNC Symbol Acc HGNC 6772
F10	SBH0167278	ENST00000262158.7	SMAD7	ENSG00000101665	SMAD family member 7 Source HGNC Symbol Acc HGNC 6773

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0348067	ENST00000350148.9	SMAD9	ENSG00000120693	SMAD family member 9 Source HGNC Symbol Acc HGNC 6774
F12	SBH0217804	ENST00000462420.2	SMO	ENSG00000128602	smoothened, frizzled class receptor Source HGNC Symbol Acc HGNC 11119
G01	SBH1220419	ENST00000426431.2	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205
G02	SBH0341614	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G03	SBH0545396	ENST00000369899.6	SUFU	ENSG00000107882	SUFU negative regulator of hedgehog signaling Source HGNC Symbol Acc HGNC 16466
G04	SBH0438163	ENST00000517851.5	TCF7	ENSG00000081059	transcription factor 7 Source HGNC Symbol Acc HGNC 11639
G05	SBH1220436	ENST00000282111.4	TCF7L1	ENSG00000152284	transcription factor 7 like 1 Source HGNC Symbol Acc HGNC 11640
G06	SBH0385754	ENST00000355717.9	TCF7L2	ENSG00000148737	transcription factor 7 like 2 Source HGNC Symbol Acc HGNC 11641
G07	SBH1220446	ENST00000374994.9	TGFBR1	ENSG00000106799	transforming growth factor beta receptor 1 Source HGNC Symbol Acc HGNC 11772
G08	SBH0598842	ENST00000295754.9	TGFBR2	ENSG00000163513	transforming growth factor beta receptor 2 Source HGNC Symbol Acc HGNC 11773
G09	SBH1220447	ENST00000370399.6	TGFBR3	ENSG00000069702	transforming growth factor beta receptor 3 Source HGNC Symbol Acc HGNC 11774
G10	SBH1220448	ENST00000258449.2	TGFBRAP1	ENSG00000135966	transforming growth factor beta receptor associated protein 1 Source HGNC Symbol Acc HGNC 16836
G11	SBH1220514	ENST00000368061.3	VANGL2	ENSG00000162738	VANGL planar cell polarity protein 2 Source HGNC Symbol Acc HGNC 15511
G12	SBH1220542	ENST00000558170.6	ZEB2	ENSG00000169554	zinc finger E-box binding homeobox 2 Source HGNC Symbol Acc HGNC 14881
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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