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

Human Hippo Signaling Pathway

Cat. no. 249950 SBHS-172ZR

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	ACTG1	AMOT	AMOTL1	AMOTL2	CASP3	CCNE1	CCNE2	CRB1	CRB2	CRB3	CSNK1D	CSNK1E
B	DCHS1	DCHS2	DIAPH2	DLG1	DVL2	FAT1	FAT2	FAT3	FAT4	FJX1	GPC5	HIPK2
C	HMCN1	AJUBA	LATS1	LATS2	LIMD1	LIX1L	LLGL1	LLGL2	LPP	MAPK10	MEIS1	MOB1B
D	MOB1A	MPDZ	MPP5	MST1	MYC	NF2	NPHP4	PARD3	PARD6G	POTEF	PPP2CB	PPP2R1A
E	PPP2R2D	PRKCI	PRKCZ	PTPN14	RASSF2	RASSF4	RERE	SAV1	SCRIB	SMAD1	STK3	STK4
F	TAOK1	TAOK2	TAOK3	TAZ	TEAD1	TEAD2	TEAD3	TEAD4	TJP1	TJP2	TP63	TSHZ1
G	TSHZ2	TSHZ3	WNT1	WTIP	WWC1	WWTR1	YAP1	YWHAB	YWHAE	YWHAQ	YWHAZ	ZDHHC18
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	SBH0598869	ENST00000575087.5	ACTG1	ENSG00000184009	actin gamma 1 Source HGNC Symbol Acc HGNC 144
A02	SBH0066200	ENST00000304758.5	AMOT	ENSG00000126016	angiomotin Source HGNC Symbol Acc HGNC 17810
A03	SBH0014545	ENST00000537191.1	AMOTL1	ENSG00000166025	angiomotin like 1 Source HGNC Symbol Acc HGNC 17811
A04	SBH0642596	ENST00000514516.5	AMOTL2	ENSG00000114019	angiomotin like 2 Source HGNC Symbol Acc HGNC 17812
A05	SBH1219824	ENST00000308394.9	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
A06	SBH1219846	ENST00000262643.8	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
A07	SBH0398871	ENST00000521809.5	CCNE2	ENSG00000175305	cyclin E2 Source HGNC Symbol Acc HGNC 1590
A08	SBH0203808	ENST00000484075.5	CRB1	ENSG00000134376	crumbs cell polarity complex component 1 Source HGNC Symbol Acc HGNC 2343
A09	SBH0244828	ENST00000460253.1	CRB2	ENSG00000148204	crumbs cell polarity complex component 2 Source HGNC Symbol Acc HGNC 18688
A10	SBH0567830	ENST00000356762.7	CRB3	ENSG00000130545	crumbs cell polarity complex component 3 Source HGNC Symbol Acc HGNC 20237
A11	SBH0504777	ENST00000314028.10	CSNK1D	ENSG00000141551	casein kinase 1 delta Source HGNC Symbol Acc HGNC 2452
A12	SBH0382030	ENST00000396832.6	CSNK1E	ENSG00000213923	casein kinase 1 epsilon Source HGNC Symbol Acc HGNC 2453
B01	SBH0483584	ENST00000299441.5	DCHS1	ENSG00000166341	dachsous cadherin-related 1 Source HGNC Symbol Acc HGNC 13681
B02	SBH0312532	ENST00000507542.2	DCHS2	ENSG00000197410	dachsous cadherin-related 2 Source HGNC Symbol Acc HGNC 23111
B03	SBH0027272	ENST00000324765.13	DIAPH2	ENSG00000147202	diaphanous related formin 2 Source HGNC Symbol Acc HGNC 2877
B04	SBH0490562	ENST00000346964.6	DLG1	ENSG00000075711	discs large MAGUK scaffold protein 1 Source HGNC Symbol Acc HGNC 2900
B05	SBH1219963	ENST00000005340.10	DVL2	ENSG00000004975	dishevelled segment polarity protein 2 Source HGNC Symbol Acc HGNC 3086
B06	SBH0376860	ENST00000507105.1	FAT1	ENSG00000083857	FAT atypical cadherin 1 Source HGNC Symbol Acc HGNC 3595
B07	SBH0534231	ENST00000520200.5	FAT2	ENSG00000086570	FAT atypical cadherin 2 Source HGNC Symbol Acc HGNC 3596
B08	SBH0178860	ENST00000489716.1	FAT3	ENSG00000165323	FAT atypical cadherin 3 Source HGNC Symbol Acc HGNC 23112
B09	SBH0010019	ENST00000509444.1	FAT4	ENSG00000196159	FAT atypical cadherin 4 Source HGNC Symbol Acc HGNC 23109
B10	SBH0378536	ENST00000317811.5	FJX1	ENSG00000179431	four-jointed box kinase 1 Source HGNC Symbol Acc HGNC 17166
B11	SBH0659237	ENST00000618596.1	GPC5	ENSG00000179399	glypican 5 Source HGNC Symbol Acc HGNC 4453
B12	SBH1220061	ENST00000342645.7	HIPK2	ENSG00000064393	homeodomain interacting protein kinase 2 Source HGNC Symbol Acc HGNC 14402
C01	SBH0591758	ENST00000485744.5	HMCN1	ENSG00000143341	hemicentin 1 Source HGNC Symbol Acc HGNC 19194
C02	SBH0022966	ENST00000556731.5	AJUBA	ENSG00000129474	ajuba LIM protein Source HGNC Symbol Acc HGNC 20250
C03	SBH0046904	ENST00000253339.9	LATS1	ENSG00000131023	large tumor suppressor kinase 1 Source HGNC Symbol Acc HGNC 6514
C04	SBH0346534	ENST00000382592.5	LATS2	ENSG00000150457	large tumor suppressor kinase 2 Source HGNC Symbol Acc HGNC 6515
C05	SBH0287878	ENST00000474665.1	LIMD1	ENSG00000144791	LIM domains containing 1 Source HGNC Symbol Acc HGNC 6612
C06	SBH0627758	ENST00000604000.4	LIX1L	ENSG00000271601	limb and CNS expressed 1 like Source HGNC Symbol Acc HGNC 28715
C07	SBH0188578	ENST00000479155.1	LLGL1	ENSG00000131899	LLGL scribble cell polarity complex component 1 Source HGNC Symbol Acc HGNC 6628
C08	SBH0402037	ENST00000375227.8	LLGL2	ENSG00000073350	LLGL scribble cell polarity complex component 2 Source HGNC Symbol Acc HGNC 6629
C09	SBH0564692	ENST00000618621.4	LPP	ENSG00000145012	LIM domain containing preferred translocation partner in lipoma Source HGNC Symbol Acc HGNC 6679
C10	SBH0213234	ENST00000641208.1	MAPK10	ENSG00000109339	mitogen-activated protein kinase 10 Source HGNC Symbol Acc HGNC 6872
		ENST00000488		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0108816	550.5	MEIS1	143995	Meis homeobox 1 Source HGNC Symbol Acc HGNC 7000
C12	SBH0169302	ENST00000309395.6	MOB1B	ENSG00000173542	MOB kinase activator 1B Source HGNC Symbol Acc HGNC 29801
D01	SBH0495115	ENST00000463975.1	MOB1A	ENSG00000114978	MOB kinase activator 1A Source HGNC Symbol Acc HGNC 16015
D02	SBH0660946	ENST00000545857.5	MPDZ	ENSG00000107186	multiple PDZ domain crumbs cell polarity complex component Source HGNC Symbol Acc HGNC 7208
D03	SBH0359138	ENST00000557783.1	MPP5	ENSG00000072415	membrane palmitoylated protein 5 Source HGNC Symbol Acc HGNC 18669
D04	SBH0527371	ENST00000484673.5	MST1	ENSG00000173531	macrophage stimulating 1 Source HGNC Symbol Acc HGNC 7380
D05	SBH0426145	ENST00000524013.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D06	SBH0223108	ENST00000361452.8	NF2	ENSG00000186575	neurofibromin 2 Source HGNC Symbol Acc HGNC 7773
D07	SBH0178362	ENST00000378156.9	NPHP4	ENSG00000131697	nephrocystin 4 Source HGNC Symbol Acc HGNC 19104
D08	SBH0638795	ENST00000374789.8	PARD3	ENSG00000148498	par-3 family cell polarity regulator Source HGNC Symbol Acc HGNC 16051
D09	SBH0088885	ENST00000470488.2	PARD6G	ENSG00000178184	par-6 family cell polarity regulator gamma Source HGNC Symbol Acc HGNC 16076
D10	SBH0191808	ENST00000361163.8	POTEF	ENSG00000196604	POTE ankyrin domain family member F Source HGNC Symbol Acc HGNC 33905
D11	SBH0201604	ENST00000523023.1	PPP2CB	ENSG00000104695	protein phosphatase 2 catalytic subunit beta Source HGNC Symbol Acc HGNC 9300
D12	SBH0592683	ENST00000454220.6	PPP2R1A	ENSG00000105568	protein phosphatase 2 scaffold subunit Aalpha Source HGNC Symbol Acc HGNC 9302
E01	SBH0392713	ENST00000472664.1	PPP2R2D	ENSG00000175470	protein phosphatase 2 regulatory subunit Bdelta Source HGNC Symbol Acc HGNC 23732
E02	SBH0105783	ENST00000295797.5	PRKCI	ENSG00000163558	protein kinase C iota Source HGNC Symbol Acc HGNC 9404
E03	SBH1220333	ENST00000470596.5	PRKCZ	ENSG00000067606	protein kinase C zeta Source HGNC Symbol Acc HGNC 9412
E04	SBH0023264	ENST00000543945.5	PTPN14	ENSG00000152104	protein tyrosine phosphatase, non-receptor type 14 Source HGNC Symbol Acc HGNC 9647
E05	SBH0525584	ENST00000379400.8	RASSF2	ENSG00000101265	Ras association domain family member 2 Source HGNC Symbol Acc HGNC 9883
E06	SBH0198509	ENST00000484477.2	RASSF4	ENSG00000107551	Ras association domain family member 4 Source HGNC Symbol Acc HGNC 20793
E07	SBH0138614	ENST00000480342.5	RERE	ENSG00000142599	arginine-glutamic acid dipeptide repeats Source HGNC Symbol Acc HGNC 9965
E08	SBH0654155	ENST00000553731.1	SAV1	ENSG00000151748	salvador family WW domain containing protein 1 Source HGNC Symbol Acc HGNC 17795
E09	SBH0478351	ENST00000356994.7	SCRIB	ENSG00000180900	scribbled planar cell polarity protein Source HGNC Symbol Acc HGNC 30377
E10	SBH1220404	ENST00000394092.6	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
E11	SBH0395272	ENST00000419617.7	STK3	ENSG00000104375	serine/threonine kinase 3 Source HGNC Symbol Acc HGNC 11406
E12	SBH0045694	ENST00000499879.6	STK4	ENSG00000101109	serine/threonine kinase 4 Source HGNC Symbol Acc HGNC 11408
F01	SBH0090827	ENST00000577583.1	TAOK1	ENSG00000160551	TAO kinase 1 Source HGNC Symbol Acc HGNC 29259
F02	SBH0639979	ENST00000308893.9	TAOK2	ENSG00000149930	TAO kinase 2 Source HGNC Symbol Acc HGNC 16835
F03	SBH0333973	ENST00000392533.8	TAOK3	ENSG00000135090	TAO kinase 3 Source HGNC Symbol Acc HGNC 18133
F04	SBH0087006	ENST00000617701.5	TAZ	ENSG00000102125	tafazzin Source HGNC Symbol Acc HGNC 11577
F05	SBH0201222	ENST00000334310.10	TEAD1	ENSG00000187079	TEA domain transcription factor 1 Source HGNC Symbol Acc HGNC 11714
F06	SBH0218716	ENST00000377214.8	TEAD2	ENSG00000074219	TEA domain transcription factor 2 Source HGNC Symbol Acc HGNC 11715
F07	SBH0225224	ENST00000402886.8	TEAD3	ENSG00000007866	TEA domain transcription factor 3 Source HGNC Symbol Acc HGNC 11716
F08	SBH0606365	ENST00000358409.6	TEAD4	ENSG00000197905	TEA domain transcription factor 4 Source HGNC Symbol Acc HGNC 11717
F09	SBH0205595	ENST00000346128.10	TJP1	ENSG00000104067	tight junction protein 1 Source HGNC Symbol Acc HGNC 11827
F10	SBH0343445	ENST00000423935.6	TJP2	ENSG00000119139	tight junction protein 2 Source HGNC Symbol Acc HGNC 11828

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0211471	ENST00000354600.9	TP63	ENSG00000073282	tumor protein p63 Source HGNC Symbol Acc HGNC 15979
F12	SBH0490949	ENST00000584217.1	TSHZ1	ENSG00000179981	teashirt zinc finger homeobox 1 Source HGNC Symbol Acc HGNC 10669
G01	SBH0519674	ENST00000603338.2	TSHZ2	ENSG00000182463	teashirt zinc finger homeobox 2 Source HGNC Symbol Acc HGNC 13010
G02	SBH0667468	ENST00000560707.1	TSHZ3	ENSG00000121297	teashirt zinc finger homeobox 3 Source HGNC Symbol Acc HGNC 30700
G03	SBH0160221	ENST00000293549.3	WNT1	ENSG00000125084	Wnt family member 1 Source HGNC Symbol Acc HGNC 12774
G04	SBH0116560	ENST00000585928.1	WTIP	ENSG00000142279	WT1 interacting protein Source HGNC Symbol Acc HGNC 20964
G05	SBH0066579	ENST00000524093.5	WWC1	ENSG00000113645	WW and C2 domain containing 1 Source HGNC Symbol Acc HGNC 29435
G06	SBH0125873	ENST00000467467.5	WWTR1	ENSG00000018408	WW domain containing transcription regulator 1 Source HGNC Symbol Acc HGNC 24042
G07	SBH0505597	ENST00000529029.1	YAP1	ENSG00000137693	Yes associated protein 1 Source HGNC Symbol Acc HGNC 16262
G08	SBH0489751	ENST00000631616.1	YWHAB	ENSG00000166913	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein beta Source HGNC Symbol Acc HGNC 12849
G09	SBH0556078	ENST00000466227.6	YWHAE	ENSG00000108953	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein epsilon Source HGNC Symbol Acc HGNC 12851
G10	SBH0646571	ENST00000474715.1	YWHAQ	ENSG00000134308	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein theta Source HGNC Symbol Acc HGNC 12854
G11	SBH0393119	ENST00000395957.6	YWHAZ	ENSG00000164924	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein zeta Source HGNC Symbol Acc HGNC 12855
G12	SBH0189059	ENST00000374141.6	ZDHHC18	ENSG00000204160	zinc finger DHHC-type containing 18 Source HGNC Symbol Acc HGNC 20712
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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