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

Human Primary Cilia

Cat. no. 249950 SBHS-127ZR

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	ADCY3	ADCY7	AHI1	AKT1	ALMS1	ARL13B	ARL6	AVPR2	AXIN2	BBS1	BBS2	BBS4
B	BBS7	BTRC	CC2D2A	CCND1	CDC42	CDK5RAP2	CDKN1A	CEP290	DVL1	DYNC2LI1	FAT4	FJX1
C	FOS	FUZ	FZD1	GLI1	GLI2	GLI3	GLIS2	GSK3B	HNF1B	HTR6	IFT172	IFT20
D	IFT74	IFT80	IFT88	IGF1	IHH	INS	INTU	INVS	IQCB1	ITGB1	KIF3A	KIF3B
E	KRAS	LRP2	MAP2K1	MAPK1	MKKS	MKS1	MOS	MTOR	NEK8	NPHP1	NPHP3	OFD1
F	PDGFRA	PIK3CA	PKD1	PKD2	PKHD1	PRKCA	PTCH1	PTPN5	RAB23	RHOA	ROCK2	RPGRIP1L
G	SHH	SMO	SSTR3	SUFU	TMEM67	TP53	TSC1	TSC2	TTC8	VANGL2	WNT9B	WWTR1
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	SBH0625641	ENST00000455323.1	ADCY3	ENSG00000138031	adenylate cyclase 3 Source HGNC Symbol Acc HGNC 234
A02	SBH0654544	ENST00000563677.1	ADCY7	ENSG00000121281	adenylate cyclase 7 Source HGNC Symbol Acc HGNC 238
A03	SBH0589201	ENST00000488690.6	AHI1	ENSG00000135541	Abelson helper integration site 1 Source HGNC Symbol Acc HGNC 21575
A04	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A05	SBH0581525	ENST00000476650.2	ALMS1	ENSG00000116127	ALMS1, centrosome and basal body associated protein Source HGNC Symbol Acc HGNC 428
A06	SBH0610779	ENST00000394222.7	ARL13B	ENSG00000169379	ADP ribosylation factor like GTPase 13B Source HGNC Symbol Acc HGNC 25419
A07	SBH0054733	ENST00000463745.6	ARL6	ENSG00000113966	ADP ribosylation factor like GTPase 6 Source HGNC Symbol Acc HGNC 13210
A08	SBH0515669	ENST00000430697.1	AVPR2	ENSG00000126895	arginine vasopressin receptor 2 Source HGNC Symbol Acc HGNC 897
A09	SBH0541946	ENST00000578251.1	AXIN2	ENSG00000168646	axin 2 Source HGNC Symbol Acc HGNC 904
A10	SBH0293766	ENST00000529766.5	BBS1	ENSG00000174483	Bardet-Biedl syndrome 1 Source HGNC Symbol Acc HGNC 966
A11	SBH0234129	ENST00000568104.5	BBS2	ENSG00000125124	Bardet-Biedl syndrome 2 Source HGNC Symbol Acc HGNC 967
A12	SBH0408609	ENST00000567279.5	BBS4	ENSG00000140463	Bardet-Biedl syndrome 4 Source HGNC Symbol Acc HGNC 969
B01	SBH0477753	ENST00000264499.8	BBS7	ENSG00000138686	Bardet-Biedl syndrome 7 Source HGNC Symbol Acc HGNC 18758
B02	SBH1219819	ENST00000393441.8	BTRC	ENSG00000166167	beta-transducin repeat containing E3 ubiquitin protein ligase Source HGNC Symbol Acc HGNC 1144
B03	SBH0259072	ENST00000512702.5	CC2D2A	ENSG00000048342	coiled-coil and C2 domain containing 2A Source HGNC Symbol Acc HGNC 29253
B04	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B05	SBH0651826	ENST00000651171.1	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
B06	SBH0586517	ENST00000360822.7	CDK5RAP2	ENSG00000136861	CDK5 regulatory subunit associated protein 2 Source HGNC Symbol Acc HGNC 18672
B07	SBH0608500	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B08	SBH0575162	ENST00000604024.5	CEP290	ENSG00000198707	centrosomal protein 290 Source HGNC Symbol Acc HGNC 29021
B09	SBH0623008	ENST00000378891.9	DVL1	ENSG00000107404	dishevelled segment polarity protein 1 Source HGNC Symbol Acc HGNC 3084
B10	SBH0347163	ENST00000605786.5	DYNC2LI1	ENSG00000138036	dynein cytoplasmic 2 light intermediate chain 1 Source HGNC Symbol Acc HGNC 24595
B11	SBH0010019	ENST00000509444.1	FAT4	ENSG00000196159	FAT atypical cadherin 4 Source HGNC Symbol Acc HGNC 23109
B12	SBH0378536	ENST00000317811.5	FJX1	ENSG00000179431	four-jointed box kinase 1 Source HGNC Symbol Acc HGNC 17166
C01	SBH1220004	ENST00000554617.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C02	SBH0351201	ENST00000525130.5	FUZ	ENSG00000010361	fuzzy planar cell polarity protein Source HGNC Symbol Acc HGNC 26219
C03	SBH0084545	ENST00000287934.3	FZD1	ENSG00000157240	frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038
C04	SBH0169622	ENST00000528467.1	GLI1	ENSG00000111087	GLI family zinc finger 1 Source HGNC Symbol Acc HGNC 4317
C05	SBH0023726	ENST00000452692.5	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
C06	SBH0142624	ENST00000448703.5	GLI3	ENSG00000106571	GLI family zinc finger 3 Source HGNC Symbol Acc HGNC 4319
C07	SBH0161635	ENST00000433375.1	GLIS2	ENSG00000126603	GLIS family zinc finger 2 Source HGNC Symbol Acc HGNC 29450
C08	SBH0579883	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
C09	SBH0568375	ENST00000617811.5	HNF1B	ENSG00000275410	HNF1 homeobox B Source HGNC Symbol Acc HGNC 11630
C10	SBH0313684	ENST00000289753.2	HTR6	ENSG00000158748	5-hydroxytryptamine receptor 6 Source HGNC Symbol Acc HGNC 5301
		ENST00000359		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0382534	466.10	IFT172	138002	intraflagellar transport 172 Source HGNC Symbol Acc HGNC 30391
C12	SBH0575034	ENST00000582797.5	IFT20	ENSG00000109083	intraflagellar transport 20 Source HGNC Symbol Acc HGNC 30989
D01	SBH0663514	ENST00000648373.1	IFT74	ENSG00000096872	intraflagellar transport 74 Source HGNC Symbol Acc HGNC 21424
D02	SBH0418200	ENST00000486856.5	IFT80	ENSG00000068885	intraflagellar transport 80 Source HGNC Symbol Acc HGNC 29262
D03	SBH0217520	ENST00000482172.5	IFT88	ENSG00000032742	intraflagellar transport 88 Source HGNC Symbol Acc HGNC 20606
D04	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D05	SBH0302017	ENST00000295731.7	IHH	ENSG00000163501	Indian hedgehog signaling molecule Source HGNC Symbol Acc HGNC 5956
D06	SBH0403664	ENST00000250971.7	INS	ENSG00000254647	insulin Source HGNC Symbol Acc HGNC 6081
D07	SBH0298324	ENST00000504276.1	INTU	ENSG00000164066	inturned planar cell polarity protein Source HGNC Symbol Acc HGNC 29239
D08	SBH0501517	ENST00000460636.2	INVS	ENSG00000119509	inversin Source HGNC Symbol Acc HGNC 17870
D09	SBH0518345	ENST00000393650.7	IQCB1	ENSG00000173226	IQ motif containing B1 Source HGNC Symbol Acc HGNC 28949
D10	SBH1220136	ENST00000302278.8	ITGB1	ENSG00000150093	integrin subunit beta 1 Source HGNC Symbol Acc HGNC 6153
D11	SBH0223313	ENST00000488471.1	KIF3A	ENSG00000131437	kinesin family member 3A Source HGNC Symbol Acc HGNC 6319
D12	SBH0561707	ENST00000375712.4	KIF3B	ENSG00000101350	kinesin family member 3B Source HGNC Symbol Acc HGNC 6320
E01	SBH0300474	ENST00000556131.1	KRAS	ENSG00000133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
E02	SBH0244488	ENST00000443831.1	LRP2	ENSG00000081479	LDL receptor related protein 2 Source HGNC Symbol Acc HGNC 6694
E03	SBH0671782	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
E04	SBH1220192	ENST00000544786.1	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
E05	SBH0271341	ENST00000347364.7	MKKS	ENSG00000125863	McKusick-Kaufman syndrome Source HGNC Symbol Acc HGNC 7108
E06	SBH0043158	ENST00000577824.5	MKS1	ENSG00000011143	Meckel syndrome, type 1 Source HGNC Symbol Acc HGNC 7121
E07	SBH0504342	ENST00000311923.1	MOS	ENSG00000172680	MOS proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 7199
E08	SBH0492696	ENST00000361445.8	MTOR	ENSG00000198793	mechanistic target of rapamycin kinase Source HGNC Symbol Acc HGNC 3942
E09	SBH0511015	ENST00000581000.1	NEK8	ENSG00000160602	NIMA related kinase 8 Source NCBI gene Acc 284086
E10	SBH0575230	ENST00000461707.5	NPHP1	ENSG00000144061	nephrocystin 1 Source HGNC Symbol Acc HGNC 7905
E11	SBH0505321	ENST00000337331.10	NPHP3	ENSG00000113971	nephrocystin 3 Source HGNC Symbol Acc HGNC 7907
E12	SBH0119103	ENST00000474705.1	OFD1	ENSG00000046651	OFD1, centriole and centriolar satellite protein Source HGNC Symbol Acc HGNC 2567
F01	SBH1220292	ENST00000257290.10	PDGFRA	ENSG00000134853	platelet derived growth factor receptor alpha Source HGNC Symbol Acc HGNC 8803
F02	SBH0121428	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
F03	SBH0340022	ENST00000566784.5	PKD1	ENSG00000008710	polycystin 1, transient receptor potential channel interacting Source HGNC Symbol Acc HGNC 9008
F04	SBH0352509	ENST00000508588.5	PKD2	ENSG00000118762	polycystin 2, transient receptor potential cation channel Source HGNC Symbol Acc HGNC 9009
F05	SBH0162536	ENST00000340994.4	PKHD1	ENSG00000170927	PKHD1, fibrocystin/polyductin Source HGNC Symbol Acc HGNC 9016
F06	SBH0105563	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F07	SBH0360047	ENST00000331920.10	PTCH1	ENSG00000185920	patched 1 Source HGNC Symbol Acc HGNC 9585
F08	SBH0242627	ENST00000358540.7	PTPN5	ENSG00000110786	protein tyrosine phosphatase, non-receptor type 5 Source HGNC Symbol Acc HGNC 9657
F09	SBH0181491	ENST00000468148.6	RAB23	ENSG00000112210	RAB23, member RAS oncogene family Source HGNC Symbol Acc HGNC 14263
F10	SBH1220367	ENST00000418115.6	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0416756	ENST00000401753.5	ROCK2	ENSG00000134318	Rho associated coiled-coil containing protein kinase 2 Source HGNC Symbol Acc HGNC 10252
F12	SBH0126125	ENST00000566096.5	RPGRIP1L	ENSG00000103494	RPGRIP1 like Source HGNC Symbol Acc HGNC 29168
G01	SBH0041689	ENST00000430104.5	SHH	ENSG00000164690	sonic hedgehog signaling molecule Source HGNC Symbol Acc HGNC 10848
G02	SBH0217804	ENST00000462420.2	SMO	ENSG00000128602	smoothened, frizzled class receptor Source HGNC Symbol Acc HGNC 11119
G03	SBH0107057	ENST00000617123.1	SSTR3	ENSG00000278195	somatostatin receptor 3 Source HGNC Symbol Acc HGNC 11332
G04	SBH0545396	ENST00000369899.6	SUFU	ENSG00000107882	SUFU negative regulator of hedgehog signaling Source HGNC Symbol Acc HGNC 16466
G05	SBH0525222	ENST00000521065.1	TMEM67	ENSG00000164953	transmembrane protein 67 Source HGNC Symbol Acc HGNC 28396
G06	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G07	SBH0061747	ENST00000647506.1	TSC1	ENSG00000165699	TSC complex subunit 1 Source HGNC Symbol Acc HGNC 12362
G08	SBH0580963	ENST00000644399.1	TSC2	ENSG00000103197	TSC complex subunit 2 Source HGNC Symbol Acc HGNC 12363
G09	SBH0523397	ENST00000338104.10	TTC8	ENSG00000165533	tetratricopeptide repeat domain 8 Source HGNC Symbol Acc HGNC 20087
G10	SBH1220514	ENST00000368061.3	VANGL2	ENSG00000162738	VANGL planar cell polarity protein 2 Source HGNC Symbol Acc HGNC 15511
G11	SBH0107840	ENST00000575372.5	WNT9B	ENSG00000158955	Wnt family member 9B Source HGNC Symbol Acc HGNC 12779
G12	SBH0125873	ENST00000467467.5	WWTR1	ENSG00000018408	WW domain containing transcription regulator 1 Source HGNC Symbol Acc HGNC 24042
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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