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

Human Stem Cell Transcription Factors

Cat. no. 249950 SBHS-501ZR

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	CDX2	DACH1	DLX1	DLX2	DNMT3B	EGR3	ESR1	EZH2	FOXA1	FOXA2	FOXP1	FOXP2
B	FOXP3	GATA1	GATA6	GLI2	HAND1	HOXA10	HOXA11	HOXA2	HOXA3	HOXA7	HOXA9	HOXB1
C	HOXB13	HOXB3	HOXB5	HOXB8	HOXC10	HOXC12	HOXC4	HOXC5	HOXC6	HOXC9	HOXD1	HOXD10
D	HOXD4	HTR7	IRX4	ISL1	JUN	KLF2	KLF4	LIN28B	LMX1B	MSX2	MYC	NANOG
E	NEUROD1	NFATC1	NKX2-2	NOTCH2	NR2F2	OLIG2	PAX1	PAX5	PAX6	PAX9	PCNA	PITX2
F	PITX3	POU4F1	POU4F2	POU5F1	PPARG	RB1	RUNX1	SIX2	SMAD2	SOX2	SOX6	SOX9
G	SP1	STAT1	STAT3	TBX5	TDGF1	TERT	TLX3	VDR	WRN	WT1	ZFPM2	ZIC1
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	SBH0146515	ENST00000548877.1	CDX2	ENSG00000165556	caudal type homeobox 2 Source HGNC Symbol Acc HGNC 1806
A02	SBH0606111	ENST00000620444.4	DACH1	ENSG00000276644	dachshund family transcription factor 1 Source HGNC Symbol Acc HGNC 2663
A03	SBH0542815	ENST00000475989.2	DLX1	ENSG00000144355	distal-less homeobox 1 Source HGNC Symbol Acc HGNC 2914
A04	SBH1219955	ENST00000466293.2	DLX2	ENSG00000115844	distal-less homeobox 2 Source HGNC Symbol Acc HGNC 2915
A05	SBH0465845	ENST00000328111.6	DNMT3B	ENSG00000088305	DNA methyltransferase 3 beta Source HGNC Symbol Acc HGNC 2979
A06	SBH0457320	ENST00000518773.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
A07	SBH0125383	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
A08	SBH0648935	ENST00000483012.1	EZH2	ENSG00000106462	enhancer of zeste 2 polycomb repressive complex 2 subunit Source HGNC Symbol Acc HGNC 3527
A09	SBH0233971	ENST00000545425.2	FOXA1	ENSG00000129514	forkhead box A1 Source HGNC Symbol Acc HGNC 5021
A10	SBH0328492	ENST00000419308.6	FOXA2	ENSG00000125798	forkhead box A2 Source HGNC Symbol Acc HGNC 5022
A11	SBH0216579	ENST00000649631.1	FOXP1	ENSG00000114861	forkhead box P1 Source HGNC Symbol Acc HGNC 3823
A12	SBH0453076	ENST00000393491.7	FOXP2	ENSG00000128573	forkhead box P2 Source HGNC Symbol Acc HGNC 13875
B01	SBH0423236	ENST00000376199.7	FOXP3	ENSG00000049768	forkhead box P3 Source HGNC Symbol Acc HGNC 6106
B02	SBH0536812	ENST00000651144.1	GATA1	ENSG00000102145	GATA binding protein 1 Source HGNC Symbol Acc HGNC 4170
B03	SBH0297185	ENST00000269216.8	GATA6	ENSG00000141448	GATA binding protein 6 Source HGNC Symbol Acc HGNC 4174
B04	SBH0023726	ENST00000452692.5	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
B05	SBH0331125	ENST00000231121.3	HAND1	ENSG00000113196	heart and neural crest derivatives expressed 1 Source HGNC Symbol Acc HGNC 4807
B06	SBH0356807	ENST00000613671.1	HOXA10	ENSG00000253293	homeobox A10 Source HGNC Symbol Acc HGNC 5100
B07	SBH0152177	ENST00000006015.3	HOXA11	ENSG00000005073	homeobox A11 Source HGNC Symbol Acc HGNC 5101
B08	SBH0492916	ENST00000222718.7	HOXA2	ENSG00000105996	homeobox A2 Source HGNC Symbol Acc HGNC 5103
B09	SBH0057391	ENST00000612286.4	HOXA3	ENSG00000105997	homeobox A3 Source HGNC Symbol Acc HGNC 5104
B10	SBH0462849	ENST00000242159.5	HOXA7	ENSG00000122592	homeobox A7 Source HGNC Symbol Acc HGNC 5108
B11	SBH0462244	ENST00000396345.1	HOXA9	ENSG00000078399	homeobox A9 Source HGNC Symbol Acc HGNC 5109
B12	SBH0270434	ENST00000644632.1	HOXB1	ENSG00000120094	homeobox B1 Source HGNC Symbol Acc HGNC 5111
C01	SBH0407867	ENST00000290295.7	HOXB13	ENSG00000159184	homeobox B13 Source HGNC Symbol Acc HGNC 5112
C02	SBH0221629	ENST00000460160.5	HOXB3	ENSG00000120093	homeobox B3 Source HGNC Symbol Acc HGNC 5114
C03	SBH0030306	ENST00000239151.5	HOXB5	ENSG00000120075	homeobox B5 Source HGNC Symbol Acc HGNC 5116
C04	SBH0245191	ENST00000498634.2	HOXB8	ENSG00000120068	homeobox B8 Source HGNC Symbol Acc HGNC 5119
C05	SBH0424829	ENST00000511575.1	HOXC10	ENSG00000180818	homeobox C10 Source HGNC Symbol Acc HGNC 5122
C06	SBH0569098	ENST00000243103.4	HOXC12	ENSG00000123407	homeobox C12 Source HGNC Symbol Acc HGNC 5124
C07	SBH0409037	ENST00000303406.4	HOXC4	ENSG00000198353	homeobox C4 Source HGNC Symbol Acc HGNC 5126
C08	SBH0075173	ENST00000312492.2	HOXC5	ENSG00000172789	homeobox C5 Source HGNC Symbol Acc HGNC 5127
C09	SBH0018336	ENST00000509328.1	HOXC6	ENSG00000197757	homeobox C6 Source HGNC Symbol Acc HGNC 5128
C10	SBH0028038	ENST00000303450.5	HOXC9	ENSG00000180806	homeobox C9 Source NCBI gene Acc 3225
		ENST00000331		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0179819	462.6	HOXD1	128645	homeobox D1 Source HGNC Symbol Acc HGNC 5132
C12	SBH0575764	ENST00000490088.2	HOXD10	ENSG00000128710	homeobox D10 Source HGNC Symbol Acc HGNC 5133
D01	SBH0006338	ENST00000306324.4	HOXD4	ENSG00000170166	homeobox D4 Source HGNC Symbol Acc HGNC 5138
D02	SBH0162397	ENST00000277874.10	HTR7	ENSG00000148680	5-hydroxytryptamine receptor 7 Source HGNC Symbol Acc HGNC 5302
D03	SBH0113786	ENST00000513692.5	IRX4	ENSG00000113430	iroquois homeobox 4 Source HGNC Symbol Acc HGNC 6129
D04	SBH0269954	ENST00000505475.3	ISL1	ENSG00000016082	ISL LIM homeobox 1 Source HGNC Symbol Acc HGNC 6132
D05	SBH0613340	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D06	SBH0267292	ENST00000592003.1	KLF2	ENSG00000127528	Kruppel like factor 2 Source HGNC Symbol Acc HGNC 6347
D07	SBH0614186	ENST00000497048.5	KLF4	ENSG00000136826	Kruppel like factor 4 Source HGNC Symbol Acc HGNC 6348
D08	SBH0480481	ENST00000635857.1	LIN28B	ENSG00000187772	lin-28 homolog B Source HGNC Symbol Acc HGNC 32207
D09	SBH0068829	ENST00000355497.9	LMX1B	ENSG00000136944	LIM homeobox transcription factor 1 beta Source HGNC Symbol Acc HGNC 6654
D10	SBH0031791	ENST00000239243.7	MSX2	ENSG00000120149	msh homeobox 2 Source HGNC Symbol Acc HGNC 7392
D11	SBH0426145	ENST00000524013.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D12	SBH1225384	ENST00000229307.9	NANOG	ENSG00000111704	Nanog homeobox Source HGNC Symbol Acc HGNC 20857
E01	SBH0212925	ENST00000295108.3	NEUROD1	ENSG00000162992	neuronal differentiation 1 Source HGNC Symbol Acc HGNC 7762
E02	SBH0171265	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
E03	SBH0273624	ENST00000377142.4	NKX2-2	ENSG00000125820	NK2 homeobox 2 Source HGNC Symbol Acc HGNC 7835
E04	SBH0378554	ENST00000256646.7	NOTCH2	ENSG00000134250	notch 2 Source HGNC Symbol Acc HGNC 7882
E05	SBH0311465	ENST00000453270.2	NR2F2	ENSG00000185551	nuclear receptor subfamily 2 group F member 2 Source HGNC Symbol Acc HGNC 7976
E06	SBH0642856	ENST00000333337.3	OLIG2	ENSG00000205927	oligodendrocyte transcription factor 2 Source HGNC Symbol Acc HGNC 9398
E07	SBH0353440	ENST00000444366.2	PAX1	ENSG00000125813	paired box 1 Source HGNC Symbol Acc HGNC 8615
E08	SBH0623717	ENST00000520281.5	PAX5	ENSG00000196092	paired box 5 Source HGNC Symbol Acc HGNC 8619
E09	SBH0042496	ENST00000533333.5	PAX6	ENSG00000007372	paired box 6 Source HGNC Symbol Acc HGNC 8620
E10	SBH0074965	ENST00000554201.1	PAX9	ENSG00000198807	paired box 9 Source HGNC Symbol Acc HGNC 8623
E11	SBH0251688	ENST00000379160.3	PCNA	ENSG00000132646	proliferating cell nuclear antigen Source HGNC Symbol Acc HGNC 8729
E12	SBH0008517	ENST00000306732.8	PITX2	ENSG00000164093	paired like homeodomain 2 Source HGNC Symbol Acc HGNC 9005
F01	SBH0480168	ENST00000539804.1	PITX3	ENSG00000107859	paired like homeodomain 3 Source HGNC Symbol Acc HGNC 9006
F02	SBH0664038	ENST00000377208.7	POU4F1	ENSG00000152192	POU class 4 homeobox 1 Source HGNC Symbol Acc HGNC 9218
F03	SBH0081659	ENST00000281321.3	POU4F2	ENSG00000151615	POU class 4 homeobox 2 Source HGNC Symbol Acc HGNC 9219
F04	SBH1225387	ENST00000513407.1	POU5F1	ENSG00000204531	POU class 5 homeobox 1 Source HGNC Symbol Acc HGNC 9221
F05	SBH0521265	ENST00000652522.1	PPARG	ENSG00000132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
F06	SBH0093533	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F07	SBH0384721	ENST00000437180.5	RUNX1	ENSG00000159216	runt related transcription factor 1 Source HGNC Symbol Acc HGNC 10471
F08	SBH0623273	ENST00000303077.7	SIX2	ENSG00000170577	SIX homeobox 2 Source HGNC Symbol Acc HGNC 10888
F09	SBH1220405	ENST00000262160.11	SMAD2	ENSG00000175387	SMAD family member 2 Source HGNC Symbol Acc HGNC 6768
F10	SBH0499815	ENST00000325404.3	SOX2	ENSG00000181449	SRY-box 2 Source HGNC Symbol Acc HGNC 11195

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0656062	ENST00000528252.5	SOX6	ENSG00000110693	SRY-box 6 Source HGNC Symbol Acc HGNC 16421
F12	SBH0112513	ENST00000245479.3	SOX9	ENSG00000125398	SRY-box 9 Source HGNC Symbol Acc HGNC 11204
G01	SBH1220419	ENST00000426431.2	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205
G02	SBH0333289	ENST00000361099.7	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
G03	SBH0341614	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G04	SBH0526624	ENST00000552726.1	TBX5	ENSG00000089225	T-box 5 Source HGNC Symbol Acc HGNC 11604
G05	SBH0577809	ENST00000471721.1	TDGF1	ENSG00000241186	teratocarcinoma-derived growth factor 1 Source HGNC Symbol Acc HGNC 11701
G06	SBH0606096	ENST00000334602.10	TERT	ENSG00000164362	telomerase reverse transcriptase Source HGNC Symbol Acc HGNC 11730
G07	SBH0122434	ENST00000296921.6	TLX3	ENSG00000164438	T cell leukemia homeobox 3 Source HGNC Symbol Acc HGNC 13532
G08	SBH0641867	ENST00000546653.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G09	SBH0387130	ENST00000650667.1	WRN	ENSG00000165392	Werner syndrome RecQ like helicase Source HGNC Symbol Acc HGNC 12791
G10	SBH0326930	ENST00000650861.1	WT1	ENSG00000184937	Wilms tumor 1 Source HGNC Symbol Acc HGNC 12796
G11	SBH0458224	ENST00000407775.7	ZFPM2	ENSG00000169946	zinc finger protein, FOG family member 2 Source HGNC Symbol Acc HGNC 16700
G12	SBH0050477	ENST00000474034.1	ZIC1	ENSG00000152977	Zic family member 1 Source HGNC Symbol Acc HGNC 12872
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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