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

Human Epigenetic Chromatin Modification Enzymes

Cat. no. 249950 SBHS-085ZR

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	ASH1L	ATF2	AURKA	AURKB	AURKC	CARM1	CDYL	CIITA	KAT14	DNMT1	DNMT3A	DNMT3B
B	DOT1L	DZIP3	EHMT2	ESCO1	ESCO2	HAT1	HDAC1	HDAC10	HDAC11	HDAC2	HDAC3	HDAC4
C	HDAC5	HDAC6	HDAC7	HDAC8	HDAC9	KAT2A	KAT2B	KAT5	KAT6A	KAT6B	KAT7	KAT8
D	KDM1A	KDM4A	KDM4C	KDM5B	KDM5C	KDM6B	MBD2	KMT2A	KMT2C	KMT2E	MYSM1	NCOA1
E	NCOA3	NCOA6	NEK6	NSD1	PAK1	PRMT1	PRMT2	PRMT3	PRMT5	PRMT6	PRMT7	PRMT8
F	RNF2	RNF20	RPS6KA3	RPS6KA5	SETD1A	SETD1B	SETD2	SETD3	SETD4	SETD5	SETD6	SETD7
G	KMT5A	SETDB1	SETDB2	SMYD3	SUV39H1	KMT5B	UBE2A	UBE2B	USP16	USP21	USP22	NSD2
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	SBH1219752	ENST00000392403.8	ASH1L	ENSG00000116539	ASH1 like histone lysine methyltransferase Source HGNC Symbol Acc HGNC 19088
A02	SBH1219753	ENST00000409833.5	ATF2	ENSG00000115966	activating transcription factor 2 Source HGNC Symbol Acc HGNC 784
A03	SBH0360632	ENST00000441357.5	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
A04	SBH0250324	ENST00000580998.5	AURKB	ENSG00000178999	aurora kinase B Source HGNC Symbol Acc HGNC 11390
A05	SBH0371600	ENST00000598785.5	AURKC	ENSG00000105146	aurora kinase C Source HGNC Symbol Acc HGNC 11391
A06	SBH0380608	ENST00000327064.8	CARM1	ENSG00000142453	coactivator associated arginine methyltransferase 1 Source HGNC Symbol Acc HGNC 23393
A07	SBH1219882	ENST00000449732.6	CDYL	ENSG00000153046	chromodomain Y like Source HGNC Symbol Acc HGNC 1811
A08	SBH1219889	ENST00000618207.4	CIITA	ENSG00000179583	class II major histocompatibility complex transactivator Source HGNC Symbol Acc HGNC 7067
A09	SBH0144854	ENST00000435364.7	KAT14	ENSG00000149474	lysine acetyltransferase 14 Source HGNC Symbol Acc HGNC 15904
A10	SBH0209142	ENST00000340748.8	DNMT1	ENSG00000130816	DNA methyltransferase 1 Source HGNC Symbol Acc HGNC 2976
A11	SBH1219957	ENST00000264709.7	DNMT3A	ENSG00000119772	DNA methyltransferase 3 alpha Source HGNC Symbol Acc HGNC 2978
A12	SBH0465845	ENST00000328111.6	DNMT3B	ENSG00000088305	DNA methyltransferase 3 beta Source HGNC Symbol Acc HGNC 2979
B01	SBH0522005	ENST00000608122.1	DOT1L	ENSG00000104885	DOT1 like histone lysine methyltransferase Source HGNC Symbol Acc HGNC 24948
B02	SBH1219964	ENST00000463306.1	DZIP3	ENSG00000198919	DAZ interacting zinc finger protein 3 Source HGNC Symbol Acc HGNC 30938
B03	SBH0009075	ENST00000375537.8	EHMT2	ENSG00000204371	euchromatic histone lysine methyltransferase 2 Source HGNC Symbol Acc HGNC 14129
B04	SBH1219985	ENST00000269214.10	ESCO1	ENSG00000141446	establishment of sister chromatid cohesion N-acetyltransferase 1 Source HGNC Symbol Acc HGNC 24645
B05	SBH0620338	ENST00000518262.5	ESCO2	ENSG00000171320	establishment of sister chromatid cohesion N-acetyltransferase 2 Source HGNC Symbol Acc HGNC 27230
B06	SBH1220047	ENST00000264108.5	HAT1	ENSG00000128708	histone acetyltransferase 1 Source HGNC Symbol Acc HGNC 4821
B07	SBH0527067	ENST00000472928.5	HDAC1	ENSG00000116478	histone deacetylase 1 Source HGNC Symbol Acc HGNC 4852
B08	SBH1220048	ENST00000216271.10	HDAC10	ENSG00000100429	histone deacetylase 10 Source HGNC Symbol Acc HGNC 18128
B09	SBH1220049	ENST00000437379.2	HDAC11	ENSG00000163517	histone deacetylase 11 Source HGNC Symbol Acc HGNC 19086
B10	SBH1220050	ENST00000519108.5	HDAC2	ENSG00000196591	histone deacetylase 2 Source HGNC Symbol Acc HGNC 4853
B11	SBH1220051	ENST00000305264.8	HDAC3	ENSG00000171720	histone deacetylase 3 Source HGNC Symbol Acc HGNC 4854
B12	SBH0538846	ENST00000345617.7	HDAC4	ENSG00000068024	histone deacetylase 4 Source HGNC Symbol Acc HGNC 14063
C01	SBH0019397	ENST00000586802.5	HDAC5	ENSG00000108840	histone deacetylase 5 Source HGNC Symbol Acc HGNC 14068
C02	SBH0370702	ENST00000334136.10	HDAC6	ENSG00000094631	histone deacetylase 6 Source HGNC Symbol Acc HGNC 14064
C03	SBH0071727	ENST00000354334.7	HDAC7	ENSG00000061273	histone deacetylase 7 Source HGNC Symbol Acc HGNC 14067
C04	SBH1220052	ENST00000649752.1	HDAC8	ENSG00000147099	histone deacetylase 8 Source HGNC Symbol Acc HGNC 13315
C05	SBH0517526	ENST00000441542.6	HDAC9	ENSG00000048052	histone deacetylase 9 Source HGNC Symbol Acc HGNC 14065
C06	SBH1220144	ENST00000225916.10	KAT2A	ENSG00000108773	lysine acetyltransferase 2A Source HGNC Symbol Acc HGNC 4201
C07	SBH1220145	ENST00000263754.5	KAT2B	ENSG00000114166	lysine acetyltransferase 2B Source HGNC Symbol Acc HGNC 8638
C08	SBH0012827	ENST00000377046.7	KAT5	ENSG00000172977	lysine acetyltransferase 5 Source HGNC Symbol Acc HGNC 5275
C09	SBH1220146	ENST00000648335.1	KAT6A	ENSG00000083168	lysine acetyltransferase 6A Source HGNC Symbol Acc HGNC 13013
C10	SBH1220147	ENST00000372724.6	KAT6B	ENSG00000156650	lysine acetyltransferase 6B Source HGNC Symbol Acc HGNC 17582
		ENST00000259		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220148	021.9	KAT7	136504	lysine acetyltransferase 7 Source HGNC Symbol Acc HGNC 17016
C12	SBH1220149	ENST00000219797.9	KAT8	ENSG00000103510	lysine acetyltransferase 8 Source HGNC Symbol Acc HGNC 17933
D01	SBH0160579	ENST00000356634.7	KDM1A	ENSG00000004487	lysine demethylase 1A Source HGNC Symbol Acc HGNC 29079
D02	SBH1220150	ENST00000372396.4	KDM4A	ENSG00000066135	lysine demethylase 4A Source HGNC Symbol Acc HGNC 22978
D03	SBH1220151	ENST00000381309.7	KDM4C	ENSG00000107077	lysine demethylase 4C Source HGNC Symbol Acc HGNC 17071
D04	SBH0136402	ENST00000367265.8	KDM5B	ENSG00000117139	lysine demethylase 5B Source HGNC Symbol Acc HGNC 18039
D05	SBH0307026	ENST00000375401.7	KDM5C	ENSG00000126012	lysine demethylase 5C Source HGNC Symbol Acc HGNC 11114
D06	SBH0548979	ENST00000254846.9	KDM6B	ENSG00000132510	lysine demethylase 6B Source HGNC Symbol Acc HGNC 29012
D07	SBH1220197	ENST00000256429.8	MBD2	ENSG00000134046	methyl-CpG binding domain protein 2 Source HGNC Symbol Acc HGNC 6917
D08	SBH1220153	ENST00000389506.10	KMT2A	ENSG00000118058	lysine methyltransferase 2A Source HGNC Symbol Acc HGNC 7132
D09	SBH1220154	ENST00000262189.11	KMT2C	ENSG00000055609	lysine methyltransferase 2C Source HGNC Symbol Acc HGNC 13726
D10	SBH0551555	ENST00000311117.7	KMT2E	ENSG00000005483	lysine methyltransferase 2E Source HGNC Symbol Acc HGNC 18541
D11	SBH1220234	ENST00000472487.6	MYSM1	ENSG00000162601	Myb like, SWIRM and MPN domains 1 Source HGNC Symbol Acc HGNC 29401
D12	SBH0605604	ENST00000348332.7	NCOA1	ENSG00000084676	nuclear receptor coactivator 1 Source HGNC Symbol Acc HGNC 7668
E01	SBH1220237	ENST00000371998.8	NCOA3	ENSG00000124151	nuclear receptor coactivator 3 Source HGNC Symbol Acc HGNC 7670
E02	SBH1220238	ENST00000612493.4	NCOA6	ENSG00000198646	nuclear receptor coactivator 6 Source HGNC Symbol Acc HGNC 15936
E03	SBH0007479	ENST00000320246.9	NEK6	ENSG00000119408	NIMA related kinase 6 Source HGNC Symbol Acc HGNC 7749
E04	SBH0339470	ENST00000439151.6	NSD1	ENSG00000165671	nuclear receptor binding SET domain protein 1 Source HGNC Symbol Acc HGNC 14234
E05	SBH0221748	ENST00000356341.7	PAK1	ENSG00000149269	p21 (RAC1) activated kinase 1 Source HGNC Symbol Acc HGNC 8590
E06	SBH0208942	ENST00000454376.6	PRMT1	ENSG00000126457	protein arginine methyltransferase 1 Source HGNC Symbol Acc HGNC 5187
E07	SBH0357495	ENST00000397638.6	PRMT2	ENSG00000160310	protein arginine methyltransferase 2 Source HGNC Symbol Acc HGNC 5186
E08	SBH1220334	ENST00000437750.2	PRMT3	ENSG00000185238	protein arginine methyltransferase 3 Source HGNC Symbol Acc HGNC 30163
E09	SBH1220335	ENST00000553897.5	PRMT5	ENSG00000100462	protein arginine methyltransferase 5 Source HGNC Symbol Acc HGNC 10894
E10	SBH0464206	ENST00000370078.1	PRMT6	ENSG00000198890	protein arginine methyltransferase 6 Source HGNC Symbol Acc HGNC 18241
E11	SBH0470262	ENST00000441236.2	PRMT7	ENSG00000132600	protein arginine methyltransferase 7 Source HGNC Symbol Acc HGNC 25557
E12	SBH1220336	ENST00000452611.6	PRMT8	ENSG00000111218	protein arginine methyltransferase 8 Source HGNC Symbol Acc HGNC 5188
F01	SBH1220372	ENST00000367510.8	RNF2	ENSG00000121481	ring finger protein 2 Source HGNC Symbol Acc HGNC 10061
F02	SBH1220373	ENST00000389120.8	RNF20	ENSG00000155827	ring finger protein 20 Source HGNC Symbol Acc HGNC 10062
F03	SBH0461508	ENST00000644368.1	RPS6KA3	ENSG00000177189	ribosomal protein S6 kinase A3 Source HGNC Symbol Acc HGNC 10432
F04	SBH1220378	ENST00000614987.5	RPS6KA5	ENSG00000100784	ribosomal protein S6 kinase A5 Source HGNC Symbol Acc HGNC 10434
F05	SBH0038713	ENST00000452917.2	SETD1A	ENSG00000099381	SET domain containing 1A, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 29010
F06	SBH0098423	ENST00000542440.5	SETD1B	ENSG00000139718	SET domain containing 1B, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 29187
F07	SBH0413981	ENST00000409792.3	SETD2	ENSG00000181555	SET domain containing 2, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 18420
F08	SBH0638726	ENST00000329331.7	SETD3	ENSG00000183576	SET domain containing 3, actin histidine methyltransferase Source HGNC Symbol Acc HGNC 20493
F09	SBH0252544	ENST00000332131.8	SETD4	ENSG00000185917	SET domain containing 4 Source HGNC Symbol Acc HGNC 1258
F10	SBH1220392	ENST00000407969.5	SETD5	ENSG00000168137	SET domain containing 5 Source HGNC Symbol Acc HGNC 25566

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0062784	ENST00000310682.6	SETD6	ENSG00000103037	SET domain containing 6, protein lysine methyltransferase Source HGNC Symbol Acc HGNC 26116
F12	SBH0119503	ENST00000274031.7	SETD7	ENSG00000145391	SET domain containing 7, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 30412
G01	SBH0601947	ENST00000461103.5	KMT5A	ENSG00000183955	lysine methyltransferase 5A Source HGNC Symbol Acc HGNC 29489
G02	SBH0095720	ENST00000368969.8	SETDB1	ENSG00000143379	SET domain bifurcated histone lysine methyltransferase 1 Source HGNC Symbol Acc HGNC 10761
G03	SBH1220393	ENST00000258672.9	SETDB2	ENSG00000136169	SET domain bifurcated histone lysine methyltransferase 2 Source HGNC Symbol Acc HGNC 20263
G04	SBH0182486	ENST00000630181.2	SMYD3	ENSG00000185420	SET and MYND domain containing 3 Source HGNC Symbol Acc HGNC 15513
G05	SBH0161308	ENST00000376687.3	SUV39H1	ENSG00000101945	suppressor of variegation 3-9 homolog 1 Source HGNC Symbol Acc HGNC 11479
G06	SBH0428015	ENST00000401547.6	KMT5B	ENSG00000110066	lysine methyltransferase 5B Source HGNC Symbol Acc HGNC 24283
G07	SBH0085981	ENST00000630695.2	UBE2A	ENSG00000077721	ubiquitin conjugating enzyme E2 A Source HGNC Symbol Acc HGNC 12472
G08	SBH1220501	ENST00000265339.6	UBE2B	ENSG00000119048	ubiquitin conjugating enzyme E2 B Source HGNC Symbol Acc HGNC 12473
G09	SBH1220511	ENST00000399975.7	USP16	ENSG00000156256	ubiquitin specific peptidase 16 Source HGNC Symbol Acc HGNC 12614
G10	SBH0262320	ENST00000289865.12	USP21	ENSG00000143258	ubiquitin specific peptidase 21 Source HGNC Symbol Acc HGNC 12620
G11	SBH1220512	ENST00000537526.6	USP22	ENSG00000124422	ubiquitin specific peptidase 22 Source HGNC Symbol Acc HGNC 12621
G12	SBH1220524	ENST00000514045.5	NSD2	ENSG00000109685	nuclear receptor binding SET domain protein 2 Source HGNC Symbol Acc HGNC 12766
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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