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

Human Epigenetic Chromatin Modification Enzymes

Cat. no. 249955 UPHS-085ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR 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 Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH1132242	ENST00000392403.8	ASH1L	ENSG00000116539	ASH1 like histone lysine methyltransferase Source HGNC Symbol Acc HGNC 19088
A02	UPFH1132243	ENST00000426833.7	ATF2	ENSG00000115966	activating transcription factor 2 Source HGNC Symbol Acc HGNC 784
A03	UPFH0528207	ENST00000347343.6	AURKA	ENSG00000087586	aurora kinase A Source HGNC Symbol Acc HGNC 11393
A04	UPFH1132261	ENST00000316199.10	AURKB	ENSG00000178999	aurora kinase B Source HGNC Symbol Acc HGNC 11390
A05	UPFH0080001	ENST00000598785.5	AURKC	ENSG00000105146	aurora kinase C Source HGNC Symbol Acc HGNC 11391
A06	UPFH0220402	ENST00000590039.5	CARM1	ENSG00000142453	coactivator associated arginine methyltransferase 1 Source HGNC Symbol Acc HGNC 23393
A07	UPFH0157532	ENST00000440139.5	CDYL	ENSG00000153046	chromodomain Y like Source HGNC Symbol Acc HGNC 1811
A08	UPFH0518652	ENST00000324288.13	CIITA	ENSG00000179583	class II major histocompatibility complex transactivator Source HGNC Symbol Acc HGNC 7067
A09	UPFH0335283	ENST00000435364.7	KAT14	ENSG00000149474	lysine acetyltransferase 14 Source HGNC Symbol Acc HGNC 15904
A10	UPFH1132365	ENST00000359526.9	DNMT1	ENSG00000130816	DNA methyltransferase 1 Source HGNC Symbol Acc HGNC 2976
A11	UPFH1132366	ENST00000264709.7	DNMT3A	ENSG00000119772	DNA methyltransferase 3 alpha Source HGNC Symbol Acc HGNC 2978
A12	UPFH0334974	ENST00000328111.6	DNMT3B	ENSG00000088305	DNA methyltransferase 3 beta Source HGNC Symbol Acc HGNC 2979
B01	UPFH1132367	ENST00000398665.8	DOT1L	ENSG00000104885	DOT1 like histone lysine methyltransferase Source HGNC Symbol Acc HGNC 24948
B02	UPFH1132374	ENST00000463306.1	DZIP3	ENSG00000198919	DAZ interacting zinc finger protein 3 Source HGNC Symbol Acc HGNC 30938
B03	UPFH0098006	ENST00000375537.8	EHMT2	ENSG00000204371	euchromatic histone lysine methyltransferase 2 Source HGNC Symbol Acc HGNC 14129
B04	UPFH0367075	ENST00000269214.10	ESCO1	ENSG00000141446	establishment of sister chromatid cohesion N-acetyltransferase 1 Source HGNC Symbol Acc HGNC 24645
B05	UPFH0591951	ENST00000305188.12	ESCO2	ENSG00000171320	establishment of sister chromatid cohesion N-acetyltransferase 2 Source HGNC Symbol Acc HGNC 27230
B06	UPFH0343734	ENST00000412731.5	HAT1	ENSG00000128708	histone acetyltransferase 1 Source HGNC Symbol Acc HGNC 4821
B07	UPFH1132434	ENST00000373548.8	HDAC1	ENSG00000116478	histone deacetylase 1 Source HGNC Symbol Acc HGNC 4852
B08	UPFH1132435	ENST00000626012.2	HDAC10	ENSG00000100429	histone deacetylase 10 Source HGNC Symbol Acc HGNC 18128
B09	UPFH1132436	ENST00000295757.8	HDAC11	ENSG00000163517	histone deacetylase 11 Source HGNC Symbol Acc HGNC 19086
B10	UPFH1132437	ENST00000519065.6	HDAC2	ENSG00000196591	histone deacetylase 2 Source HGNC Symbol Acc HGNC 4853
B11	UPFH1132438	ENST00000305264.8	HDAC3	ENSG00000171720	histone deacetylase 3 Source HGNC Symbol Acc HGNC 4854
B12	UPFH0101499	ENST00000345617.7	HDAC4	ENSG00000068024	histone deacetylase 4 Source HGNC Symbol Acc HGNC 14063
C01	UPFH1132439	ENST00000225983.10	HDAC5	ENSG00000108840	histone deacetylase 5 Source HGNC Symbol Acc HGNC 14068
C02	UPFH0614515	ENST00000334136.10	HDAC6	ENSG00000094631	histone deacetylase 6 Source HGNC Symbol Acc HGNC 14064
C03	UPFH1132440	ENST00000380610.8	HDAC7	ENSG00000061273	histone deacetylase 7 Source HGNC Symbol Acc HGNC 14067
C04	UPFH0383848	ENST00000373573.9	HDAC8	ENSG00000147099	histone deacetylase 8 Source HGNC Symbol Acc HGNC 13315
C05	UPFH0538990	ENST00000428307.6	HDAC9	ENSG00000048052	histone deacetylase 9 Source HGNC Symbol Acc HGNC 14065
C06	UPFH1132505	ENST00000225916.10	KAT2A	ENSG00000108773	lysine acetyltransferase 2A Source HGNC Symbol Acc HGNC 4201
C07	UPFH0515603	ENST00000263754.5	KAT2B	ENSG00000114166	lysine acetyltransferase 2B Source HGNC Symbol Acc HGNC 8638
C08	UPFH1132506	ENST00000534650.5	KAT5	ENSG00000172977	lysine acetyltransferase 5 Source HGNC Symbol Acc HGNC 5275
C09	UPFH1132507	ENST00000396930.4	KAT6A	ENSG00000083168	lysine acetyltransferase 6A Source HGNC Symbol Acc HGNC 13013
C10	UPFH0151615	ENST00000648725.1	KAT6B	ENSG00000156650	lysine acetyltransferase 6B Source HGNC Symbol Acc HGNC 17582
		ENST00000259		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132508	021.9	KAT7	136504	lysine acetyltransferase 7 Source HGNC Symbol Acc HGNC 17016
C12	UPFH1132509	ENST00000219 797.9	KAT8	ENSG00000 103510	lysine acetyltransferase 8 Source HGNC Symbol Acc HGNC 17933
D01	UPFH1132972	ENST00000356 634.7	KDM1A	ENSG00000 004487	lysine demethylase 1A Source HGNC Symbol Acc HGNC 29079
D02	UPFH1132510	ENST00000372 396.4	KDM4A	ENSG00000 066135	lysine demethylase 4A Source HGNC Symbol Acc HGNC 22978
D03	UPFH0345191	ENST00000381 309.7	KDM4C	ENSG00000 107077	lysine demethylase 4C Source HGNC Symbol Acc HGNC 17071
D04	UPFH1124837	ENST00000367 265.8	KDM5B	ENSG00000 117139	lysine demethylase 5B Source HGNC Symbol Acc HGNC 18039
D05	UPFH0100249	ENST00000375 401.7	KDM5C	ENSG00000 126012	lysine demethylase 5C Source HGNC Symbol Acc HGNC 11114
D06	UPFH1132894	ENST00000254 846.9	KDM6B	ENSG00000 132510	lysine demethylase 6B Source HGNC Symbol Acc HGNC 29012
D07	UPFH1132536	ENST00000256 429.8	MBD2	ENSG00000 134046	methyl-CpG binding domain protein 2 Source HGNC Symbol Acc HGNC 6917
D08	UPFH0455243	ENST00000534 678.3	KMT2A	ENSG00000 118058	lysine methyltransferase 2A Source HGNC Symbol Acc HGNC 7132
D09	UPFH0042794	ENST00000424 877.5	KMT2C	ENSG00000 055609	lysine methyltransferase 2C Source HGNC Symbol Acc HGNC 13726
D10	UPFH0343528	ENST00000311 117.7	KMT2E	ENSG00000 005483	lysine methyltransferase 2E Source HGNC Symbol Acc HGNC 18541
D11	UPFH1132564	ENST00000472 487.6	MYSM1	ENSG00000 162601	Myb like, SWIRM and MPN domains 1 Source HGNC Symbol Acc HGNC 29401
D12	UPFH0385216	ENST00000406 961.5	NCOA1	ENSG00000 084676	nuclear receptor coactivator 1 Source HGNC Symbol Acc HGNC 7668
E01	UPFH1132566	ENST00000372 004.7	NCOA3	ENSG00000 124151	nuclear receptor coactivator 3 Source HGNC Symbol Acc HGNC 7670
E02	UPFH1132567	ENST00000359 003.7	NCOA6	ENSG00000 198646	nuclear receptor coactivator 6 Source HGNC Symbol Acc HGNC 15936
E03	UPFH0072051	ENST00000444 973.5	NEK6	ENSG00000 119408	NIMA related kinase 6 Source HGNC Symbol Acc HGNC 7749
E04	UPFH0484749	ENST00000439 151.6	NSD1	ENSG00000 165671	nuclear receptor binding SET domain protein 1 Source HGNC Symbol Acc HGNC 14234
E05	UPFH0310946	ENST00000356 341.7	PAK1	ENSG00000 149269	p21 (RAC1) activated kinase 1 Source HGNC Symbol Acc HGNC 8590
E06	UPFH0152296	ENST00000454 376.6	PRMT1	ENSG00000 126457	protein arginine methyltransferase 1 Source HGNC Symbol Acc HGNC 5187
E07	UPFH1132636	ENST00000397 628.5	PRMT2	ENSG00000 160310	protein arginine methyltransferase 2 Source HGNC Symbol Acc HGNC 5186
E08	UPFH0371792	ENST00000330 796.9	PRMT3	ENSG00000 185238	protein arginine methyltransferase 3 Source HGNC Symbol Acc HGNC 30163
E09	UPFH1132637	ENST00000216 350.12	PRMT5	ENSG00000 100462	protein arginine methyltransferase 5 Source HGNC Symbol Acc HGNC 10894
E10	UPFH0324846	ENST00000370 078.1	PRMT6	ENSG00000 198890	protein arginine methyltransferase 6 Source HGNC Symbol Acc HGNC 18241
E11	UPFH0431154	ENST00000441 236.2	PRMT7	ENSG00000 132600	protein arginine methyltransferase 7 Source HGNC Symbol Acc HGNC 25557
E12	UPFH0445686	ENST00000382 622.3	PRMT8	ENSG00000 111218	protein arginine methyltransferase 8 Source HGNC Symbol Acc HGNC 5188
F01	UPFH1132659	ENST00000367 510.8	RNF2	ENSG00000 121481	ring finger protein 2 Source HGNC Symbol Acc HGNC 10061
F02	UPFH1132660	ENST00000389 120.8	RNF20	ENSG00000 155827	ring finger protein 20 Source HGNC Symbol Acc HGNC 10062
F03	UPFH0104534	ENST00000379 565.8	RPS6KA3	ENSG00000 177189	ribosomal protein S6 kinase A3 Source HGNC Symbol Acc HGNC 10432
F04	UPFH1122533	ENST00000556 178.5	RPS6KA5	ENSG00000 100784	ribosomal protein S6 kinase A5 Source HGNC Symbol Acc HGNC 10434
F05	UPFH1132672	ENST00000262 519.14	SETD1A	ENSG00000 099381	SET domain containing 1A, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 29010
F06	UPFH1132673	ENST00000619 791.1	SETD1B	ENSG00000 139718	SET domain containing 1B, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 29187
F07	UPFH0217267	ENST00000409 792.3	SETD2	ENSG00000 181555	SET domain containing 2, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 18420
F08	UPFH1132885	ENST00000331 768.10	SETD3	ENSG00000 183576	SET domain containing 3, actin histidine methyltransferase Source HGNC Symbol Acc HGNC 20493
F09	UPFH1132674	ENST00000399 212.5	SETD4	ENSG00000 185917	SET domain containing 4 Source HGNC Symbol Acc HGNC 1258
F10	UPFH0492332	ENST00000402 198.5	SETD5	ENSG00000 168137	SET domain containing 5 Source HGNC Symbol Acc HGNC 25566

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0561718	ENST00000310682.6	SETD6	ENSG00000103037	SET domain containing 6, protein lysine methyltransferase Source HGNC Symbol Acc HGNC 26116
F12	UPFH0578230	ENST00000274031.7	SETD7	ENSG00000145391	SET domain containing 7, histone lysine methyltransferase Source HGNC Symbol Acc HGNC 30412
G01	UPFH0028748	ENST00000402868.8	KMT5A	ENSG00000183955	lysine methyltransferase 5A Source HGNC Symbol Acc HGNC 29489
G02	UPFH1132675	ENST00000498193.5	SETDB1	ENSG00000143379	SET domain bifurcated histone lysine methyltransferase 1 Source HGNC Symbol Acc HGNC 10761
G03	UPFH0137728	ENST00000258672.9	SETDB2	ENSG00000136169	SET domain bifurcated histone lysine methyltransferase 2 Source HGNC Symbol Acc HGNC 20263
G04	UPFH1132689	ENST00000490107.6	SMYD3	ENSG00000185420	SET and MYND domain containing 3 Source HGNC Symbol Acc HGNC 15513
G05	UPFH0492546	ENST00000376687.3	SUV39H1	ENSG00000101945	suppressor of variegation 3-9 homolog 1 Source HGNC Symbol Acc HGNC 11479
G06	UPFH0115478	ENST00000401547.6	KMT5B	ENSG00000110066	lysine methyltransferase 5B Source HGNC Symbol Acc HGNC 24283
G07	UPFH0593504	ENST00000631185.2	UBE2A	ENSG00000077721	ubiquitin conjugating enzyme E2 A Source HGNC Symbol Acc HGNC 12472
G08	UPFH1132975	ENST00000507277.1	UBE2B	ENSG00000119048	ubiquitin conjugating enzyme E2 B Source HGNC Symbol Acc HGNC 12473
G09	UPFH1132753	ENST00000399976.7	USP16	ENSG00000156256	ubiquitin specific peptidase 16 Source HGNC Symbol Acc HGNC 12614
G10	UPFH0143179	ENST00000289865.12	USP21	ENSG00000143258	ubiquitin specific peptidase 21 Source HGNC Symbol Acc HGNC 12620
G11	UPFH0235242	ENST00000261497.9	USP22	ENSG00000124422	ubiquitin specific peptidase 22 Source HGNC Symbol Acc HGNC 12621
G12	UPFH1132758	ENST00000382892.6	NSD2	ENSG00000109685	nuclear receptor binding SET domain protein 2 Source HGNC Symbol Acc HGNC 12766
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe PCR Focus Panels are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.