QuantiNova® LNA® PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Human Alzheimer's Disease

Cat. no. 249950 SBHS-057ZA

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 (96-well): QuantiNova LNA PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	A2M	ABCA1	ACHE	ADAM10	ADAM9	APBA1	APBA3	APBB1	APBB2	APH1A	APLP1	APLP2
B	APOA1	APOE	APP	BACE1	BACE2	BCHE	BDNF	CAPN1	CASP3	CASP4	CDK1	CDK5
C	CDKL1	CHAT	CLU	CTSB	CTSC	CTSD	CTSG	CTSL	EP300	ERN1	GAP43	GNAO1
D	GNAZ	GNB1	GNB2	GNB4	GNB5	GNG11	GNG3	GNG4	GNGT1	GNGT2	GSK3A	GSK3B
E	HSD17B10	IDE	IL1A	INS	INSR	LPL	LRP1	LRP6	LRP8	MAP2	MAPT	MPO
F	NAE1	NCSTN	NTRK1	NTRK2	PKP4	PLAT	PLAU	PLG	PRKCA	PRKCB	PRKCD	PRKCE
G	PRKCG	PRKCI	PRKCQ	PRKCZ	PSEN1	PSEN2	SERPINA3	SNCA	SNCB	UBQLN1	UQCRC1	UQCRC2
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	SBH0203648	ENST00000472360.1	A2M	ENSG00000175899	alpha-2-macroglobulin Source HGNC Symbol Acc HGNC 7
A02	SBH0311739	ENST00000423487.6	ABCA1	ENSG00000165029	ATP binding cassette subfamily A member 1 Source HGNC Symbol Acc HGNC 29
A03	SBH0162921	ENST00000440755.5	ACHE	ENSG00000087085	acetylcholinesterase (Cartwright blood group) Source HGNC Symbol Acc HGNC 108
A04	SBH0047492	ENST00000482945.5	ADAM10	ENSG00000137845	ADAM metallopeptidase domain 10 Source HGNC Symbol Acc HGNC 188
A05	SBH0000241	ENST00000466936.5	ADAM9	ENSG00000168615	ADAM metallopeptidase domain 9 Source HGNC Symbol Acc HGNC 216
A06	SBH0091087	ENST00000470082.2	APBA1	ENSG00000107282	amyloid beta precursor protein binding family A member 1 Source HGNC Symbol Acc HGNC 578
A07	SBH0530242	ENST00000589934.1	APBA3	ENSG00000011132	amyloid beta precursor protein binding family A member 3 Source HGNC Symbol Acc HGNC 580
A08	SBH0163775	ENST00000618005.4	APBB1	ENSG00000166313	amyloid beta precursor protein binding family B member 1 Source HGNC Symbol Acc HGNC 581
A09	SBH0352740	ENST00000514094.5	APBB2	ENSG00000163697	amyloid beta precursor protein binding family B member 2 Source HGNC Symbol Acc HGNC 582
A10	SBH0214544	ENST00000414276.6	APH1A	ENSG00000117362	aph-1 homolog A, gamma-secretase subunit Source HGNC Symbol Acc HGNC 29509
A11	SBH0173884	ENST00000221891.8	APLP1	ENSG00000105290	amyloid beta precursor like protein 1 Source HGNC Symbol Acc HGNC 597
A12	SBH0503132	ENST00000530132.5	APLP2	ENSG00000084234	amyloid beta precursor like protein 2 Source HGNC Symbol Acc HGNC 598
B01	SBH0583640	ENST00000375320.5	APOA1	ENSG00000118137	apolipoprotein A1 Source HGNC Symbol Acc HGNC 600
B02	SBH0562930	ENST00000434152.5	APOE	ENSG00000130203	apolipoprotein E Source HGNC Symbol Acc HGNC 613
B03	SBH1219749	ENST00000348990.9	APP	ENSG00000142192	amyloid beta precursor protein Source HGNC Symbol Acc HGNC 620
B04	SBH0008859	ENST00000313005.10	BACE1	ENSG00000186318	beta-secretase 1 Source HGNC Symbol Acc HGNC 933
B05	SBH0400853	ENST00000330333.11	BACE2	ENSG00000182240	beta-secretase 2 Source HGNC Symbol Acc HGNC 934
B06	SBH0308336	ENST00000482958.1	BCHE	ENSG00000114200	butyrylcholinesterase Source HGNC Symbol Acc HGNC 983
B07	SBH0006040	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
B08	SBH0247299	ENST00000526954.5	CAPN1	ENSG00000014216	calpain 1 Source HGNC Symbol Acc HGNC 1476
B09	SBH1219824	ENST00000308394.9	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
B10	SBH1219825	ENST00000393150.7	CASP4	ENSG00000196954	caspase 4 Source HGNC Symbol Acc HGNC 1505
B11	SBH0229893	ENST00000395284.7	CDK1	ENSG00000170312	cyclin dependent kinase 1 Source HGNC Symbol Acc HGNC 1722
B12	SBH0103479	ENST00000485972.6	CDK5	ENSG00000164885	cyclin dependent kinase 5 Source HGNC Symbol Acc HGNC 1774
C01	SBH0131757	ENST00000216378.2	CDKL1	ENSG00000100490	cyclin dependent kinase like 1 Source HGNC Symbol Acc HGNC 1781
C02	SBH0110465	ENST00000337653.6	CHAT	ENSG00000070748	choline O-acetyltransferase Source HGNC Symbol Acc HGNC 1912
C03	SBH0298251	ENST00000523500.5	CLU	ENSG00000120885	clusterin Source HGNC Symbol Acc HGNC 2095
C04	SBH1219921	ENST00000534510.5	CTSB	ENSG00000164733	cathepsin B Source HGNC Symbol Acc HGNC 2527
C05	SBH0092572	ENST00000533865.5	CTSC	ENSG00000109861	cathepsin C Source HGNC Symbol Acc HGNC 2528
C06	SBH1219922	ENST00000637815.1	CTSD	ENSG00000117984	cathepsin D Source HGNC Symbol Acc HGNC 2529
C07	SBH0555648	ENST00000216336.3	CTSG	ENSG00000100448	cathepsin G Source HGNC Symbol Acc HGNC 2532
C08	SBH0633657	ENST00000340342.10	CTSL	ENSG00000135047	cathepsin L Source HGNC Symbol Acc HGNC 2537
C09	SBH1219977	ENST00000263253.9	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C10	SBH0314418	ENST00000433197.4	ERN1	ENSG00000178607	endoplasmic reticulum to nucleus signaling 1 Source HGNC Symbol Acc HGNC 3449
		ENST00000393		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0112006	780.3	GAP43	172020	growth associated protein 43 Source HGNC Symbol Acc HGNC 4140
C12	SBH0517768	ENST00000638705.1	GNAO1	ENSG00000087258	G protein subunit alpha o1 Source HGNC Symbol Acc HGNC 4389
D01	SBH0239528	ENST00000615612.2	GNAZ	ENSG00000128266	G protein subunit alpha z Source HGNC Symbol Acc HGNC 4395
D02	SBH0393887	ENST00000434686.6	GNB1	ENSG00000078369	G protein subunit beta 1 Source HGNC Symbol Acc HGNC 4396
D03	SBH0372656	ENST00000469287.5	GNB2	ENSG00000172354	G protein subunit beta 2 Source HGNC Symbol Acc HGNC 4398
D04	SBH0281797	ENST00000232564.8	GNB4	ENSG00000114450	G protein subunit beta 4 Source HGNC Symbol Acc HGNC 20731
D05	SBH0355644	ENST00000358784.11	GNB5	ENSG00000069966	G protein subunit beta 5 Source HGNC Symbol Acc HGNC 4401
D06	SBH0478483	ENST00000248564.5	GNG11	ENSG00000127920	G protein subunit gamma 11 Source HGNC Symbol Acc HGNC 4403
D07	SBH0321468	ENST00000294117.6	GNG3	ENSG00000162188	G protein subunit gamma 3 Source HGNC Symbol Acc HGNC 4405
D08	SBH0621603	ENST00000484517.2	GNG4	ENSG00000168243	G protein subunit gamma 4 Source HGNC Symbol Acc HGNC 4407
D09	SBH0521068	ENST00000428834.1	GNGT1	ENSG00000127928	G protein subunit gamma transducin 1 Source HGNC Symbol Acc HGNC 4411
D10	SBH0376796	ENST00000300406.6	GNGT2	ENSG00000167083	G protein subunit gamma transducin 2 Source HGNC Symbol Acc HGNC 4412
D11	SBH1220041	ENST00000222330.8	GSK3A	ENSG00000105723	glycogen synthase kinase 3 alpha Source HGNC Symbol Acc HGNC 4616
D12	SBH0579883	ENST00000316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
E01	SBH0249036	ENST00000375304.9	HSD17B10	ENSG00000072506	hydroxysteroid 17-beta dehydrogenase 10 Source HGNC Symbol Acc HGNC 4800
E02	SBH0500078	ENST00000496903.5	IDE	ENSG00000119912	insulin degrading enzyme Source HGNC Symbol Acc HGNC 5381
E03	SBH0663647	ENST00000263339.3	IL1A	ENSG00000115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
E04	SBH0403664	ENST00000250971.7	INS	ENSG00000254647	insulin Source HGNC Symbol Acc HGNC 6081
E05	SBH0198962	ENST00000600492.1	INSR	ENSG00000171105	insulin receptor Source HGNC Symbol Acc HGNC 6091
E06	SBH1220175	ENST00000311322.10	LPL	ENSG00000175445	lipoprotein lipase Source HGNC Symbol Acc HGNC 6677
E07	SBH0296428	ENST00000243077.7	LRP1	ENSG00000123384	LDL receptor related protein 1 Source HGNC Symbol Acc HGNC 6692
E08	SBH1220178	ENST00000261349.9	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
E09	SBH0162479	ENST00000306052.10	LRP8	ENSG00000157193	LDL receptor related protein 8 Source HGNC Symbol Acc HGNC 6700
E10	SBH0000648	ENST00000361559.8	MAP2	ENSG00000078018	microtubule associated protein 2 Source HGNC Symbol Acc HGNC 6839
E11	SBH0522404	ENST00000570299.5	MAPT	ENSG00000186868	microtubule associated protein tau Source HGNC Symbol Acc HGNC 6893
E12	SBH0239322	ENST00000225275.3	MPO	ENSG00000005381	myeloperoxidase Source HGNC Symbol Acc HGNC 7218
F01	SBH0516381	ENST00000290810.8	NAE1	ENSG00000159593	NEDD8 activating enzyme E1 subunit 1 Source HGNC Symbol Acc HGNC 621
F02	SBH0547598	ENST00000437169.5	NCSTN	ENSG00000162736	nicastrin Source HGNC Symbol Acc HGNC 17091
F03	SBH0383500	ENST00000392302.6	NTRK1	ENSG00000198400	neurotrophic receptor tyrosine kinase 1 Source HGNC Symbol Acc HGNC 8031
F04	SBH0629742	ENST00000277120.7	NTRK2	ENSG00000148053	neurotrophic receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 8032
F05	SBH0431863	ENST00000462335.1	PKP4	ENSG00000144283	plakophilin 4 Source HGNC Symbol Acc HGNC 9026
F06	SBH0432338	ENST00000220809.8	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
F07	SBH1220315	ENST00000446342.5	PLAU	ENSG00000122861	plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052
F08	SBH0191454	ENST00000308192.13	PLG	ENSG00000122194	plasminogen Source HGNC Symbol Acc HGNC 9071
F09	SBH0105563	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F10	SBH0521170	ENST00000472066.1	PRKCB	ENSG00000166501	protein kinase C beta Source HGNC Symbol Acc HGNC 9395

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0285878	ENST00000652449.1	PRKCD	ENSG00000163932	protein kinase C delta Source HGNC Symbol Acc HGNC 9399
F12	SBH0647980	ENST00000480453.5	PRKCE	ENSG00000171132	protein kinase C epsilon Source HGNC Symbol Acc HGNC 9401
G01	SBH0670634	ENST00000419486.1	PRKCG	ENSG00000126583	protein kinase C gamma Source HGNC Symbol Acc HGNC 9402
G02	SBH0105783	ENST00000295797.5	PRKCI	ENSG00000163558	protein kinase C iota Source HGNC Symbol Acc HGNC 9404
G03	SBH0662513	ENST00000539722.5	PRKCQ	ENSG00000065675	protein kinase C theta Source HGNC Symbol Acc HGNC 9410
G04	SBH1220333	ENST00000470596.5	PRKCZ	ENSG00000067606	protein kinase C zeta Source HGNC Symbol Acc HGNC 9412
G05	SBH0137526	ENST00000557511.5	PSEN1	ENSG00000080815	presenilin 1 Source HGNC Symbol Acc HGNC 9508
G06	SBH0022194	ENST00000521431.1	PSEN2	ENSG00000143801	presenilin 2 Source HGNC Symbol Acc HGNC 9509
G07	SBH0032295	ENST00000393078.4	SERPINA3	ENSG00000196136	serpin family A member 3 Source HGNC Symbol Acc HGNC 16
G08	SBH0118819	ENST00000394991.7	SNCA	ENSG00000145335	synuclein alpha Source HGNC Symbol Acc HGNC 11138
G09	SBH0392012	ENST00000510387.5	SNCB	ENSG00000074317	synuclein beta Source HGNC Symbol Acc HGNC 11140
G10	SBH1218346	ENST00000527373.1	UBQLN1	ENSG00000135018	ubiquilin 1 Source HGNC Symbol Acc HGNC 12508
G11	SBH1220508	ENST00000203407.6	UQCRC1	ENSG00000010256	ubiquinol-cytochrome c reductase core protein 1 Source HGNC Symbol Acc HGNC 12585
G12	SBH0577561	ENST00000268379.8	UQCRC2	ENSG00000140740	ubiquinol-cytochrome c reductase core protein 2 Source HGNC Symbol Acc HGNC 12586
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.

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.