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

Human Pain: Neuropathic & Inflammatory

Cat. no. 249950 SBHS-162ZA

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	ACE	ADORA1	ADRB2	ALOX5	BDKRB1	BDNF	CACNA1B	CALCA	CCK	CCKBR	CCL2	CCR2
B	CD200	CD4	CHRNA4	CNR1	CNR2	COMT	CSF1	CX3CR1	DBH	EDN1	EDNRA	FAAH
C	GCH1	GDNF	GRIN1	GRIN2B	GRM1	GRM5	HTR1A	HTR2A	IL10	IL18	IL1A	IL1B
D	IL2	IL6	ITGAM	ITGB2	KCNIP3	KCNJ6	KCNQ2	KCNQ3	MAOB	MAPK1	MAPK14	MAPK3
E	MAPK8	NGF	NTRK1	OPRD1	OPRK1	OPRM1	P2RX3	P2RX4	P2RX7	P2RY1	PDYN	PENK
F	PLA2G1B	PNOC	PROK2	PTGER1	PTGER3	PTGER4	PTGES	PTGES2	PTGES3	PTGS1	PTGS2	SCN10A
G	SCN11A	SCN3A	SCN9A	SLC6A2	TAC1	TACR1	TLR2	TLR4	TNF	TRPA1	TRPV1	TRPV3
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	SBH1219717	ENST00000428043.5	ACE	ENSG00000159640	angiotensin I converting enzyme Source HGNC Symbol Acc HGNC 2707
A02	SBH0029645	ENST00000337894.9	ADORA1	ENSG00000163485	adenosine A1 receptor Source HGNC Symbol Acc HGNC 262
A03	SBH0519738	ENST00000305988.5	ADRB2	ENSG00000169252	adrenoceptor beta 2 Source HGNC Symbol Acc HGNC 286
A04	SBH1219736	ENST00000374391.7	ALOX5	ENSG00000012779	arachidonate 5-lipoxygenase Source HGNC Symbol Acc HGNC 435
A05	SBH0382870	ENST00000553356.1	BDKRB1	ENSG00000100739	bradykinin receptor B1 Source HGNC Symbol Acc HGNC 1029
A06	SBH0006040	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A07	SBH0462302	ENST00000371363.5	CACNA1B	ENSG00000148408	calcium voltage-gated channel subunit alpha1 B Source HGNC Symbol Acc HGNC 1389
A08	SBH0441635	ENST00000331587.8	CALCA	ENSG00000110680	calcitonin related polypeptide alpha Source HGNC Symbol Acc HGNC 1437
A09	SBH0272659	ENST00000396169.6	CCK	ENSG00000187094	cholecystokinin Source HGNC Symbol Acc HGNC 1569
A10	SBH0114053	ENST00000525014.1	CCKBR	ENSG00000110148	cholecystokinin B receptor Source HGNC Symbol Acc HGNC 1571
A11	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
A12	SBH0387563	ENST00000445132.2	CCR2	ENSG00000121807	C-C motif chemokine receptor 2 Source HGNC Symbol Acc HGNC 1603
B01	SBH0112798	ENST00000383681.7	CD200	ENSG00000091972	CD200 molecule Source HGNC Symbol Acc HGNC 7203
B02	SBH1219860	ENST00000011653.9	CD4	ENSG00000010610	CD4 molecule Source HGNC Symbol Acc HGNC 1678
B03	SBH0600422	ENST00000627000.1	CHRNA4	ENSG00000101204	cholinergic receptor nicotinic alpha 4 subunit Source HGNC Symbol Acc HGNC 1958
B04	SBH0064955	ENST00000428600.2	CNR1	ENSG00000118432	cannabinoid receptor 1 Source HGNC Symbol Acc HGNC 2159
B05	SBH0455833	ENST00000374472.5	CNR2	ENSG00000188822	cannabinoid receptor 2 Source HGNC Symbol Acc HGNC 2160
B06	SBH0154349	ENST00000361682.10	COMT	ENSG00000093010	catechol-O-methyltransferase Source HGNC Symbol Acc HGNC 2228
B07	SBH1219913	ENST00000420111.6	CSF1	ENSG00000184371	colony stimulating factor 1 Source HGNC Symbol Acc HGNC 2432
B08	SBH0005890	ENST00000399220.2	CX3CR1	ENSG00000168329	C-X3-C motif chemokine receptor 1 Source HGNC Symbol Acc HGNC 2558
B09	SBH0275682	ENST00000393056.7	DBH	ENSG00000123454	dopamine beta-hydroxylase Source HGNC Symbol Acc HGNC 2689
B10	SBH1219968	ENST00000379375.6	EDN1	ENSG00000078401	endothelin 1 Source HGNC Symbol Acc HGNC 3176
B11	SBH0152584	ENST00000324300.10	EDNRA	ENSG00000151617	endothelin receptor type A Source HGNC Symbol Acc HGNC 3179
B12	SBH0162210	ENST00000489366.2	FAAH	ENSG00000117480	fatty acid amide hydrolase Source HGNC Symbol Acc HGNC 3553
C01	SBH0533750	ENST00000622544.4	GCH1	ENSG00000131979	GTP cyclohydrolase 1 Source HGNC Symbol Acc HGNC 4193
C02	SBH0310916	ENST00000502572.1	GDNF	ENSG00000168621	glial cell derived neurotrophic factor Source HGNC Symbol Acc HGNC 4232
C03	SBH0229177	ENST00000371559.8	GRIN1	ENSG00000176884	glutamate ionotropic receptor NMDA type subunit 1 Source HGNC Symbol Acc HGNC 4584
C04	SBH0549412	ENST00000609686.3	GRIN2B	ENSG00000273079	glutamate ionotropic receptor NMDA type subunit 2B Source HGNC Symbol Acc HGNC 4586
C05	SBH0643522	ENST00000492807.6	GRM1	ENSG00000152822	glutamate metabotropic receptor 1 Source HGNC Symbol Acc HGNC 4593
C06	SBH0239510	ENST00000305432.9	GRM5	ENSG00000168959	glutamate metabotropic receptor 5 Source HGNC Symbol Acc HGNC 4597
C07	SBH0493351	ENST00000506598.1	HTR1A	ENSG00000178394	5-hydroxytryptamine receptor 1A Source HGNC Symbol Acc HGNC 5286
C08	SBH0547087	ENST00000378688.8	HTR2A	ENSG00000102468	5-hydroxytryptamine receptor 2A Source HGNC Symbol Acc HGNC 5293
C09	SBH1220095	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
C10	SBH1220103	ENST00000524595.5	IL18	ENSG00000150782	interleukin 18 Source HGNC Symbol Acc HGNC 5986
		ENST00000263		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0663647	339.3	IL1A	115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
C12	SBH0079231	ENST00000263 341.6	IL1B	ENSG00000 125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D01	SBH0225582	ENST00000226 730.4	IL2	ENSG00000 109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D02	SBH1220111	ENST00000401 630.7	IL6	ENSG00000 136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D03	SBH0245852	ENST00000287 497.13	ITGAM	ENSG00000 169896	integrin subunit alpha M Source HGNC Symbol Acc HGNC 6149
D04	SBH0032107	ENST00000397 857.5	ITGB2	ENSG00000 160255	integrin subunit beta 2 Source HGNC Symbol Acc HGNC 6155
D05	SBH0626924	ENST00000468 529.1	KCNIP3	ENSG00000 115041	potassium voltage-gated channel interacting protein 3 Source HGNC Symbol Acc HGNC 15523
D06	SBH0559370	ENST00000645 093.1	KCNJ6	ENSG00000 157542	potassium voltage-gated channel subfamily J member 6 Source HGNC Symbol Acc HGNC 6267
D07	SBH0073761	ENST00000626 313.1	KCNQ2	ENSG00000 075043	potassium voltage-gated channel subfamily Q member 2 Source HGNC Symbol Acc HGNC 6296
D08	SBH0044290	ENST00000519 589.1	KCNQ3	ENSG00000 184156	potassium voltage-gated channel subfamily Q member 3 Source HGNC Symbol Acc HGNC 6297
D09	SBH0081757	ENST00000487 544.1	MAOB	ENSG00000 069535	monoamine oxidase B Source HGNC Symbol Acc HGNC 6834
D10	SBH1220192	ENST00000544 786.1	MAPK1	ENSG00000 100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D11	SBH0102441	ENST00000229 795.7	MAPK14	ENSG00000 112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
D12	SBH1220194	ENST00000478 356.5	MAPK3	ENSG00000 102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
E01	SBH0294318	ENST00000395 611.7	MAPK8	ENSG00000 107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
E02	SBH0318562	ENST00000369 512.2	NGF	ENSG00000 134259	nerve growth factor Source HGNC Symbol Acc HGNC 7808
E03	SBH0383500	ENST00000392 302.6	NTRK1	ENSG00000 198400	neurotrophic receptor tyrosine kinase 1 Source HGNC Symbol Acc HGNC 8031
E04	SBH0293300	ENST00000621 425.1	OPRD1	ENSG00000 116329	opioid receptor delta 1 Source HGNC Symbol Acc HGNC 8153
E05	SBH0645790	ENST00000265 572.8	OPRK1	ENSG00000 082556	opioid receptor kappa 1 Source HGNC Symbol Acc HGNC 8154
E06	SBH0612447	ENST00000522 555.5	OPRM1	ENSG00000 112038	opioid receptor mu 1 Source HGNC Symbol Acc HGNC 8156
E07	SBH0167302	ENST00000534 820.1	P2RX3	ENSG00000 109991	purinergic receptor P2X 3 Source HGNC Symbol Acc HGNC 8534
E08	SBH0333860	ENST00000359 949.11	P2RX4	ENSG00000 135124	purinergic receptor P2X 4 Source HGNC Symbol Acc HGNC 8535
E09	SBH0365004	ENST00000535 250.5	P2RX7	ENSG00000 089041	purinergic receptor P2X 7 Source HGNC Symbol Acc HGNC 8537
E10	SBH0606308	ENST00000305 097.6	P2RY1	ENSG00000 169860	purinergic receptor P2Y1 Source HGNC Symbol Acc HGNC 8539
E11	SBH0477068	ENST00000650 824.1	PDYN	ENSG00000 101327	prodynorphin Source HGNC Symbol Acc HGNC 8820
E12	SBH0387760	ENST00000518 974.5	PENK	ENSG00000 181195	proenkephalin Source HGNC Symbol Acc HGNC 8831
F01	SBH0113434	ENST00000423 423.3	PLA2G1B	ENSG00000 170890	phospholipase A2 group IB Source HGNC Symbol Acc HGNC 9030
F02	SBH0090489	ENST00000522 209.1	PNOC	ENSG00000 168081	prepronociceptin Source HGNC Symbol Acc HGNC 9163
F03	SBH0452562	ENST00000353 065.7	PROK2	ENSG00000 163421	prokineticin 2 Source HGNC Symbol Acc HGNC 18455
F04	SBH0224969	ENST00000292 513.4	PTGER1	ENSG00000 160951	prostaglandin E receptor 1 Source HGNC Symbol Acc HGNC 9593
F05	SBH0392089	ENST00000497 146.5	PTGER3	ENSG00000 050628	prostaglandin E receptor 3 Source HGNC Symbol Acc HGNC 9595
F06	SBH0548415	ENST00000512 578.1	PTGER4	ENSG00000 171522	prostaglandin E receptor 4 Source HGNC Symbol Acc HGNC 9596
F07	SBH0544203	ENST00000340 607.5	PTGES	ENSG00000 148344	prostaglandin E synthase Source HGNC Symbol Acc HGNC 9599
F08	SBH0006715	ENST00000449 878.1	PTGES2	ENSG00000 148334	prostaglandin E synthase 2 Source HGNC Symbol Acc HGNC 17822
F09	SBH0469595	ENST00000456 859.2	PTGES3	ENSG00000 110958	prostaglandin E synthase 3 Source HGNC Symbol Acc HGNC 16049
F10	SBH1220343	ENST00000540 753.6	PTGS1	ENSG00000 095303	prostaglandin-endoperoxide synthase 1 Source HGNC Symbol Acc HGNC 9604

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220344	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F12	SBH0083471	ENST00000643108.1	SCN10A	ENSG00000185313	sodium voltage-gated channel alpha subunit 10 Source HGNC Symbol Acc HGNC 10582
G01	SBH0055416	ENST00000302328.7	SCN11A	ENSG00000168356	sodium voltage-gated channel alpha subunit 11 Source HGNC Symbol Acc HGNC 10583
G02	SBH0556727	ENST00000360093.7	SCN3A	ENSG00000153253	sodium voltage-gated channel alpha subunit 3 Source HGNC Symbol Acc HGNC 10590
G03	SBH0114011	ENST00000452182.2	SCN9A	ENSG00000169432	sodium voltage-gated channel alpha subunit 9 Source HGNC Symbol Acc HGNC 10597
G04	SBH0139403	ENST00000219833.12	SLC6A2	ENSG00000103546	solute carrier family 6 member 2 Source HGNC Symbol Acc HGNC 11048
G05	SBH0039671	ENST00000350485.8	TAC1	ENSG00000006128	tachykinin precursor 1 Source HGNC Symbol Acc HGNC 11517
G06	SBH0301003	ENST00000409848.3	TACR1	ENSG00000115353	tachykinin receptor 1 Source HGNC Symbol Acc HGNC 11526
G07	SBH0671922	ENST00000642700.1	TLR2	ENSG00000137462	toll like receptor 2 Source HGNC Symbol Acc HGNC 11848
G08	SBH0092782	ENST00000355622.8	TLR4	ENSG00000136869	toll like receptor 4 Source HGNC Symbol Acc HGNC 11850
G09	SBH1220471	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G10	SBH0073624	ENST00000523582.5	TRPA1	ENSG00000104321	transient receptor potential cation channel subfamily A member 1 Source HGNC Symbol Acc HGNC 497
G11	SBH0364841	ENST00000571088.5	TRPV1	ENSG00000196689	transient receptor potential cation channel subfamily V member 1 Source HGNC Symbol Acc HGNC 12716
G12	SBH0020559	ENST00000616411.4	TRPV3	ENSG00000167723	transient receptor potential cation channel subfamily V member 3 Source HGNC Symbol Acc HGNC 18084
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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