

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

Human Osteoporosis

Cat. no. 249950 SBHS-170ZR

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	ACP5	ADCY10	ALOX12	ALOX15	ALOX5	ALPL	AR	BGLAP	BMP2	BMP7	CA2	CALCA
B	CALCR	CASR	CD40	CLCN7	CNR2	COL1A1	COL1A2	COMT	CRTAP	CTSK	CYP17A1	CYP19A1
C	DBP	DKK1	ENPP1	ESR1	ESR2	ESRRA	FGFR1	FGFR2	GHRH	HSD11B1	IGF1	IGFBP2
D	IL15	IL6	IL6R	ITGA1	ITGB3	LEP	P3H1	LRP1	LRP5	LRP6	LTA	LTBP2
E	MAB21L2	MMP2	MSTN	MTHFR	NFATC1	NOG	NOS3	NPY	NR3C1	P2RX7	PLOD2	PRL
F	PTH	PTH1R	PTH1H	RUNX2	SFRP1	SFRP4	SHBG	SOST	SPARC	SPP1	STAT1	TGFB1
G	TIMP2	TNFAIP3	TNFRSF11A	TNFRSF11B	TNFRSF1B	TNFSF11	TSHR	TWIST1	VDR	VEGFA	WNT10B	WNT3A
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	SBH0539718	ENST00000590420.1	ACP5	ENSG00000102575	acid phosphatase 5, tartrate resistant Source HGNC Symbol Acc HGNC 124
A02	SBH0058097	ENST00000367848.1	ADCY10	ENSG00000143199	adenylate cyclase 10 Source HGNC Symbol Acc HGNC 21285
A03	SBH1219735	ENST00000251535.11	ALOX12	ENSG00000108839	arachidonate 12-lipoxygenase, 12S type Source HGNC Symbol Acc HGNC 429
A04	SBH0008272	ENST00000570836.5	ALOX15	ENSG00000161905	arachidonate 15-lipoxygenase Source HGNC Symbol Acc HGNC 433
A05	SBH1219736	ENST00000374391.7	ALOX5	ENSG00000012779	arachidonate 5-lipoxygenase Source HGNC Symbol Acc HGNC 435
A06	SBH0499378	ENST00000374832.5	ALPL	ENSG00000162551	alkaline phosphatase, biomineralization associated Source HGNC Symbol Acc HGNC 438
A07	SBH0056376	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
A08	SBH1219793	ENST00000368272.5	BGLAP	ENSG00000242252	bone gamma-carboxyglutamate protein Source HGNC Symbol Acc HGNC 1043
A09	SBH1219802	ENST00000378827.5	BMP2	ENSG00000125845	bone morphogenetic protein 2 Source HGNC Symbol Acc HGNC 1069
A10	SBH1219806	ENST00000450594.6	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
A11	SBH0080578	ENST00000520996.5	CA2	ENSG00000104267	carbonic anhydrase 2 Source HGNC Symbol Acc HGNC 1373
A12	SBH0441635	ENST00000331587.8	CALCA	ENSG00000110680	calcitonin related polypeptide alpha Source HGNC Symbol Acc HGNC 1437
B01	SBH0021274	ENST00000421592.6	CALCR	ENSG00000004948	calcitonin receptor Source HGNC Symbol Acc HGNC 1440
B02	SBH0352124	ENST00000638421.1	CASR	ENSG00000036828	calcium sensing receptor Source HGNC Symbol Acc HGNC 1514
B03	SBH1219861	ENST00000372285.7	CD40	ENSG00000101017	CD40 molecule Source HGNC Symbol Acc HGNC 11919
B04	SBH0033225	ENST00000569851.6	CLCN7	ENSG00000103249	chloride voltage-gated channel 7 Source HGNC Symbol Acc HGNC 2025
B05	SBH0455833	ENST00000374472.5	CNR2	ENSG00000188822	cannabinoid receptor 2 Source HGNC Symbol Acc HGNC 2160
B06	SBH0268763	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
B07	SBH0096733	ENST00000297268.10	COL1A2	ENSG00000164692	collagen type I alpha 2 chain Source HGNC Symbol Acc HGNC 2198
B08	SBH0154349	ENST00000361682.10	COMT	ENSG00000093010	catechol-O-methyltransferase Source HGNC Symbol Acc HGNC 2228
B09	SBH0162279	ENST00000320954.10	CRTAP	ENSG00000170275	cartilage associated protein Source HGNC Symbol Acc HGNC 2379
B10	SBH0609743	ENST00000443913.1	CTSK	ENSG00000143387	cathepsin K Source HGNC Symbol Acc HGNC 2536
B11	SBH0449399	ENST00000369887.4	CYP17A1	ENSG00000148795	cytochrome P450 family 17 subfamily A member 1 Source HGNC Symbol Acc HGNC 2593
B12	SBH0032966	ENST00000405913.7	CYP19A1	ENSG00000137869	cytochrome P450 family 19 subfamily A member 1 Source HGNC Symbol Acc HGNC 2594
C01	SBH0529152	ENST00000601104.1	DBP	ENSG00000105516	D-box binding PAR bZIP transcription factor Source HGNC Symbol Acc HGNC 2697
C02	SBH0194476	ENST00000373970.4	DKK1	ENSG00000107984	dickkopf WNT signaling pathway inhibitor 1 Source HGNC Symbol Acc HGNC 2891
C03	SBH0473963	ENST00000650437.1	ENPP1	ENSG00000197594	ectonucleotide pyrophosphatase/phosphodiesterase 1 Source HGNC Symbol Acc HGNC 3356
C04	SBH0125383	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
C05	SBH0203246	ENST00000554572.5	ESR2	ENSG00000140009	estrogen receptor 2 Source HGNC Symbol Acc HGNC 3468
C06	SBH0167638	ENST00000405666.5	ESRRA	ENSG00000173153	estrogen related receptor alpha Source HGNC Symbol Acc HGNC 3471
C07	SBH0226356	ENST00000326324.10	FGFR1	ENSG00000077782	fibroblast growth factor receptor 1 Source HGNC Symbol Acc HGNC 3688
C08	SBH0451647	ENST00000369059.5	FGFR2	ENSG00000066468	fibroblast growth factor receptor 2 Source HGNC Symbol Acc HGNC 3689
C09	SBH0147840	ENST00000373614.6	GHRH	ENSG00000118702	growth hormone releasing hormone Source HGNC Symbol Acc HGNC 4265
C10	SBH0378335	ENST00000367028.6	HSD11B1	ENSG00000117594	hydroxysteroid 11-beta dehydrogenase 1 Source HGNC Symbol Acc HGNC 5208
		ENST00000337		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220091	514.10	IGF1	017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
C12	SBH0659902	ENST00000436812.1	IGFBP2	ENSG00000115457	insulin like growth factor binding protein 2 Source HGNC Symbol Acc HGNC 5471
D01	SBH1220101	ENST00000296545.11	IL15	ENSG00000164136	interleukin 15 Source HGNC Symbol Acc HGNC 5977
D02	SBH1220111	ENST00000401630.7	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D03	SBH1220112	ENST00000368485.8	IL6R	ENSG00000160712	interleukin 6 receptor Source HGNC Symbol Acc HGNC 6019
D04	SBH1220129	ENST00000282588.6	ITGA1	ENSG00000213949	integrin subunit alpha 1 Source HGNC Symbol Acc HGNC 6134
D05	SBH1220137	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
D06	SBH1220169	ENST00000308868.5	LEP	ENSG00000174697	leptin Source HGNC Symbol Acc HGNC 6553
D07	SBH0012522	ENST00000447502.2	P3H1	ENSG00000117385	prolyl 3-hydroxylase 1 Source HGNC Symbol Acc HGNC 19316
D08	SBH0296428	ENST00000243077.7	LRP1	ENSG00000123384	LDL receptor related protein 1 Source HGNC Symbol Acc HGNC 6692
D09	SBH1220177	ENST00000294304.12	LRP5	ENSG00000162337	LDL receptor related protein 5 Source HGNC Symbol Acc HGNC 6697
D10	SBH1220178	ENST00000261349.9	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
D11	SBH0249281	ENST00000418386.2	LTA	ENSG00000226979	lymphotoxin alpha Source HGNC Symbol Acc HGNC 6709
D12	SBH1220180	ENST00000556690.5	LTBP2	ENSG00000119681	latent transforming growth factor beta binding protein 2 Source HGNC Symbol Acc HGNC 6715
E01	SBH0246621	ENST00000317605.5	MAB21L2	ENSG00000181541	mab-21 like 2 Source HGNC Symbol Acc HGNC 6758
E02	SBH1220222	ENST00000570308.5	MMP2	ENSG00000087245	matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166
E03	SBH0389766	ENST00000260950.4	MSTN	ENSG00000138379	myostatin Source HGNC Symbol Acc HGNC 4223
E04	SBH0375175	ENST00000418034.1	MTHFR	ENSG00000177000	methylenetetrahydrofolate reductase Source HGNC Symbol Acc HGNC 7436
E05	SBH0171265	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
E06	SBH0651509	ENST00000332822.4	NOG	ENSG00000183691	noggin Source HGNC Symbol Acc HGNC 7866
E07	SBH1220272	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E08	SBH0377787	ENST00000407573.5	NPY	ENSG00000122585	neuropeptide Y Source HGNC Symbol Acc HGNC 7955
E09	SBH1220280	ENST00000652686.1	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
E10	SBH0365004	ENST00000535250.5	P2RX7	ENSG00000089041	purinergic receptor P2X 7 Source HGNC Symbol Acc HGNC 8537
E11	SBH0062095	ENST00000360060.7	PLOD2	ENSG00000152952	procollagen-lysine,2-oxoglutarate 5-dioxygenase 2 Source HGNC Symbol Acc HGNC 9082
E12	SBH0553464	ENST00000615510.4	PRL	ENSG00000172179	prolactin Source HGNC Symbol Acc HGNC 9445
F01	SBH0490689	ENST00000529816.1	PTH	ENSG00000152266	parathyroid hormone Source HGNC Symbol Acc HGNC 9606
F02	SBH0197185	ENST00000428220.1	PTH1R	ENSG00000160801	parathyroid hormone 1 receptor Source HGNC Symbol Acc HGNC 9608
F03	SBH0117493	ENST00000395868.7	PTHLH	ENSG00000087494	parathyroid hormone like hormone Source HGNC Symbol Acc HGNC 9607
F04	SBH0662907	ENST00000465038.6	RUNX2	ENSG00000124813	runt related transcription factor 2 Source HGNC Symbol Acc HGNC 10472
F05	SBH1220394	ENST00000220772.8	SFRP1	ENSG00000104332	secreted frizzled related protein 1 Source HGNC Symbol Acc HGNC 10776
F06	SBH1220395	ENST00000436072.7	SFRP4	ENSG00000106483	secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778
F07	SBH0250727	ENST00000572182.5	SHBG	ENSG00000129214	sex hormone binding globulin Source HGNC Symbol Acc HGNC 10839
F08	SBH0294666	ENST00000301691.3	SOST	ENSG00000167941	sclerostin Source HGNC Symbol Acc HGNC 13771
F09	SBH1220420	ENST00000521569.1	SPARC	ENSG00000113140	secreted protein acidic and cysteine rich Source HGNC Symbol Acc HGNC 11219
F10	SBH0180162	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0333289	ENST00000361099.7	STAT1	ENSG00000115415	signal transducer and activator of transcription 1 Source HGNC Symbol Acc HGNC 11362
F12	SBH1220443	ENST00000598758.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
G01	SBH0450624	ENST00000262768.11	TIMP2	ENSG00000035862	TIMP metalloproteinase inhibitor 2 Source HGNC Symbol Acc HGNC 11821
G02	SBH0348756	ENST00000614035.4	TNFAIP3	ENSG00000118503	TNF alpha induced protein 3 Source HGNC Symbol Acc HGNC 11896
G03	SBH0198097	ENST00000639222.1	TNFRSF11A	ENSG00000141655	TNF receptor superfamily member 11a Source HGNC Symbol Acc HGNC 11908
G04	SBH1220474	ENST00000297350.9	TNFRSF11B	ENSG00000164761	TNF receptor superfamily member 11b Source HGNC Symbol Acc HGNC 11909
G05	SBH1220475	ENST00000536782.2	TNFRSF1B	ENSG00000028137	TNF receptor superfamily member 1B Source HGNC Symbol Acc HGNC 11917
G06	SBH1220478	ENST00000239849.8	TNFSF11	ENSG00000120659	TNF superfamily member 11 Source HGNC Symbol Acc HGNC 11926
G07	SBH0106957	ENST00000541158.6	TSHR	ENSG00000165409	thyroid stimulating hormone receptor Source HGNC Symbol Acc HGNC 12373
G08	SBH1220496	ENST00000242261.6	TWIST1	ENSG00000122691	twist family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 12428
G09	SBH0641867	ENST00000546653.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G10	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G11	SBH0031770	ENST00000301061.9	WNT10B	ENSG00000169884	Wnt family member 10B Source HGNC Symbol Acc HGNC 12775
G12	SBH1220532	ENST00000284523.2	WNT3A	ENSG00000154342	Wnt family member 3A Source HGNC Symbol Acc HGNC 15983
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.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.