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

Human Estrogen Receptor Signaling

Cat. no. 249950 SBHS-005ZR

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	AHR	AKAP1	APBB1	BCAR1	BCL2L1	BDNF	BMP4	BMP7	BRCA1	C3	CAV1	CCL2
B	CCND1	CITED2	CKB	CCN2	CTSD	CYP19A1	CYP1A1	EBAG9	EFNA5	EGR3	ERBB2	ERBB3
C	ESR1	ESR2	FOS	FOXA1	FST	G6PD	GPER1	HSP90AA1	IGF1	IGFBP4	IGFBP5	IRS1
D	JUNB	KLK3	L1CAM	LGALS1	LPL	LTBP1	MAFF	MED1	MMP9	MTA1	MYC	NAB2
E	NCOA1	NCOA2	NCOA3	NCOR1	NCOR2	CCN3	NR0B1	NR0B2	NR2F6	NR3C1	NR5A2	NRIP1
F	NRP1	PDZK1	PELP1	PGR	PHB2	PTCH1	PTGS2	RALA	RARA	S100A6	SAFB	SNAI1
G	SOCS3	SPP1	TFF1	TGFA	TGFB3	THBS1	VDR	VEGFA	CCN5	WNT4	WNT5A	XBP1
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	SBH0503529	ENST00000492120.1	AHR	ENSG00000106546	aryl hydrocarbon receptor Source HGNC Symbol Acc HGNC 348
A02	SBH0486243	ENST00000314126.4	AKAP1	ENSG00000121057	A-kinase anchoring protein 1 Source HGNC Symbol Acc HGNC 367
A03	SBH0163775	ENST00000618005.4	APBB1	ENSG00000166313	amyloid beta precursor protein binding family B member 1 Source HGNC Symbol Acc HGNC 581
A04	SBH0344204	ENST00000162330.10	BCAR1	ENSG00000050820	BCAR1, Cas family scaffold protein Source HGNC Symbol Acc HGNC 971
A05	SBH0216029	ENST00000450273.1	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A06	SBH0006040	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A07	SBH0613995	ENST00000417573.5	BMP4	ENSG00000125378	bone morphogenetic protein 4 Source HGNC Symbol Acc HGNC 1071
A08	SBH1219806	ENST00000450594.6	BMP7	ENSG00000101144	bone morphogenetic protein 7 Source HGNC Symbol Acc HGNC 1074
A09	SBH1219814	ENST00000357654.8	BRCA1	ENSG00000012048	BRCA1, DNA repair associated Source HGNC Symbol Acc HGNC 1100
A10	SBH0244130	ENST00000245907.10	C3	ENSG00000125730	complement C3 Source HGNC Symbol Acc HGNC 1318
A11	SBH0105254	ENST00000451122.5	CAV1	ENSG00000105974	caveolin 1 Source HGNC Symbol Acc HGNC 1527
A12	SBH0228134	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B01	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B02	SBH0580180	ENST00000367651.4	CITED2	ENSG00000164442	Cbp/p300 interacting transactivator with Glu/Asp rich carboxy-terminal domain 2 Source HGNC Symbol Acc HGNC 1987
B03	SBH0049093	ENST00000554282.5	CKB	ENSG00000166165	creatine kinase B Source HGNC Symbol Acc HGNC 1991
B04	SBH1219917	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
B05	SBH1219922	ENST00000637815.1	CTSD	ENSG00000117984	cathepsin D Source HGNC Symbol Acc HGNC 2529
B06	SBH0032966	ENST00000405913.7	CYP19A1	ENSG00000137869	cytochrome P450 family 19 subfamily A member 1 Source HGNC Symbol Acc HGNC 2594
B07	SBH0255774	ENST00000566503.1	CYP1A1	ENSG00000140465	cytochrome P450 family 1 subfamily A member 1 Source HGNC Symbol Acc HGNC 2595
B08	SBH0618316	ENST00000620557.4	EBAG9	ENSG00000147654	estrogen receptor binding site associated, antigen, 9 Source HGNC Symbol Acc HGNC 3123
B09	SBH0137400	ENST00000504941.1	EFNA5	ENSG00000184349	ephrin A5 Source HGNC Symbol Acc HGNC 3225
B10	SBH0457320	ENST00000518773.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
B11	SBH0056013	ENST00000269571.9	ERBB2	ENSG00000141736	erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430
B12	SBH1219981	ENST00000549832.1	ERBB3	ENSG00000065361	erb-b2 receptor tyrosine kinase 3 Source HGNC Symbol Acc HGNC 3431
C01	SBH0125383	ENST00000206249.7	ESR1	ENSG00000091831	estrogen receptor 1 Source HGNC Symbol Acc HGNC 3467
C02	SBH0203246	ENST00000554572.5	ESR2	ENSG00000140009	estrogen receptor 2 Source HGNC Symbol Acc HGNC 3468
C03	SBH1220004	ENST00000554617.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C04	SBH0233971	ENST00000545425.2	FOXA1	ENSG00000129514	forkhead box A1 Source HGNC Symbol Acc HGNC 5021
C05	SBH0665825	ENST00000396947.7	FST	ENSG00000134363	follistatin Source HGNC Symbol Acc HGNC 3971
C06	SBH0586368	ENST00000621232.5	G6PD	ENSG00000160211	glucose-6-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4057
C07	SBH0397440	ENST00000413368.5	GPER1	ENSG00000164850	G protein-coupled estrogen receptor 1 Source HGNC Symbol Acc HGNC 4485
C08	SBH0323386	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
C09	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
C10	SBH1220093	ENST00000269593.5	IGFBP4	ENSG00000141753	insulin like growth factor binding protein 4 Source HGNC Symbol Acc HGNC 5473
		ENST00000233		ENSG00000	insulin like growth factor binding protein 5 Source HGNC Symbol Acc HGNC

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH1220094	813.5	IGFBP5	115461	5474
C12	SBH0130188	ENST00000305123.5	IRS1	ENSG00000169047	insulin receptor substrate 1 Source HGNC Symbol Acc HGNC 6125
D01	SBH1220143	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D02	SBH1220152	ENST00000598145.1	KLK3	ENSG00000142515	kallikrein related peptidase 3 Source HGNC Symbol Acc HGNC 6364
D03	SBH0575972	ENST00000361981.7	L1CAM	ENSG00000198910	L1 cell adhesion molecule Source HGNC Symbol Acc HGNC 6470
D04	SBH0260771	ENST00000464120.1	LGALS1	ENSG00000100097	galectin 1 Source HGNC Symbol Acc HGNC 6561
D05	SBH1220175	ENST00000311322.10	LPL	ENSG00000175445	lipoprotein lipase Source HGNC Symbol Acc HGNC 6677
D06	SBH1220179	ENST00000407925.5	LTBP1	ENSG00000049323	latent transforming growth factor beta binding protein 1 Source HGNC Symbol Acc HGNC 6714
D07	SBH0573275	ENST00000538320.5	MAFF	ENSG00000185022	MAF bZIP transcription factor F Source HGNC Symbol Acc HGNC 6780
D08	SBH0151089	ENST00000584308.1	MED1	ENSG00000125686	mediator complex subunit 1 Source HGNC Symbol Acc HGNC 9234
D09	SBH0471278	ENST00000372330.3	MMP9	ENSG00000100985	matrix metallopeptidase 9 Source HGNC Symbol Acc HGNC 7176
D10	SBH0256481	ENST00000435036.6	MTA1	ENSG00000182979	metastasis associated 1 Source HGNC Symbol Acc HGNC 7410
D11	SBH0426145	ENST00000524013.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
D12	SBH0411255	ENST00000342556.6	NAB2	ENSG00000166886	NGFI-A binding protein 2 Source HGNC Symbol Acc HGNC 7627
E01	SBH0605604	ENST00000348332.7	NCOA1	ENSG00000084676	nuclear receptor coactivator 1 Source HGNC Symbol Acc HGNC 7668
E02	SBH0194409	ENST00000518363.2	NCOA2	ENSG00000140396	nuclear receptor coactivator 2 Source HGNC Symbol Acc HGNC 7669
E03	SBH1220237	ENST00000371998.8	NCOA3	ENSG00000124151	nuclear receptor coactivator 3 Source HGNC Symbol Acc HGNC 7670
E04	SBH0050293	ENST00000411510.5	NCOR1	ENSG00000141027	nuclear receptor corepressor 1 Source HGNC Symbol Acc HGNC 7672
E05	SBH0634597	ENST00000356219.7	NCOR2	ENSG00000196498	nuclear receptor corepressor 2 Source HGNC Symbol Acc HGNC 7673
E06	SBH0149538	ENST00000259526.4	CCN3	ENSG00000136999	cellular communication network factor 3 Source HGNC Symbol Acc HGNC 7885
E07	SBH0152990	ENST00000378963.1	NR0B1	ENSG00000169297	nuclear receptor subfamily 0 group B member 1 Source HGNC Symbol Acc HGNC 7960
E08	SBH0031318	ENST00000254227.4	NR0B2	ENSG00000131910	nuclear receptor subfamily 0 group B member 2 Source HGNC Symbol Acc HGNC 7961
E09	SBH0356613	ENST00000291442.3	NR2F6	ENSG00000160113	nuclear receptor subfamily 2 group F member 6 Source HGNC Symbol Acc HGNC 7977
E10	SBH1220280	ENST00000652686.1	NR3C1	ENSG00000113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
E11	SBH0495051	ENST00000236914.7	NR5A2	ENSG00000116833	nuclear receptor subfamily 5 group A member 2 Source HGNC Symbol Acc HGNC 7984
E12	SBH0057786	ENST00000638122.1	NRIP1	ENSG00000180530	nuclear receptor interacting protein 1 Source HGNC Symbol Acc HGNC 8001
F01	SBH1220281	ENST00000374823.9	NRP1	ENSG00000099250	neuropilin 1 Source HGNC Symbol Acc HGNC 8004
F02	SBH0516456	ENST00000417171.5	PDZK1	ENSG00000174827	PDZ domain containing 1 Source HGNC Symbol Acc HGNC 8821
F03	SBH0630654	ENST00000570571.5	PELP1	ENSG00000141456	proline, glutamate and leucine rich protein 1 Source HGNC Symbol Acc HGNC 30134
F04	SBH0508179	ENST00000534780.5	PGR	ENSG00000082175	progesterone receptor Source HGNC Symbol Acc HGNC 8910
F05	SBH0625406	ENST00000399433.6	PHB2	ENSG00000215021	prohibitin 2 Source HGNC Symbol Acc HGNC 30306
F06	SBH0360047	ENST00000331920.10	PTCH1	ENSG00000185920	patched 1 Source HGNC Symbol Acc HGNC 9585
F07	SBH1220344	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F08	SBH0349213	ENST00000436179.1	RALA	ENSG00000006451	RAS like proto-oncogene A Source HGNC Symbol Acc HGNC 9839
F09	SBH0530002	ENST00000425707.7	RARA	ENSG00000131759	retinoic acid receptor alpha Source HGNC Symbol Acc HGNC 9864
F10	SBH0242143	ENST00000496817.5	S100A6	ENSG00000197956	S100 calcium binding protein A6 Source HGNC Symbol Acc HGNC 10496

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH0401099	ENST00000588852.2	SAFB	ENSG00000160633	scaffold attachment factor B Source HGNC Symbol Acc HGNC 10520
F12	SBH1220409	ENST00000244050.3	SNAI1	ENSG00000124216	snail family transcriptional repressor 1 Source HGNC Symbol Acc HGNC 11128
G01	SBH1220413	ENST00000330871.3	SOCS3	ENSG00000184557	suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391
G02	SBH0180162	ENST00000237623.11	SPP1	ENSG00000118785	secreted phosphoprotein 1 Source HGNC Symbol Acc HGNC 11255
G03	SBH0279437	ENST00000291527.3	TFF1	ENSG00000160182	trefoil factor 1 Source HGNC Symbol Acc HGNC 11755
G04	SBH1220442	ENST00000445399.5	TGFA	ENSG00000163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765
G05	SBH0179529	ENST00000238682.7	TGFB3	ENSG00000119699	transforming growth factor beta 3 Source HGNC Symbol Acc HGNC 11769
G06	SBH1220450	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G07	SBH0641867	ENST00000546653.5	VDR	ENSG00000111424	vitamin D receptor Source HGNC Symbol Acc HGNC 12679
G08	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G09	SBH0641750	ENST00000471629.1	CCN5	ENSG00000064205	cellular communication network factor 5 Source HGNC Symbol Acc HGNC 12770
G10	SBH1220533	ENST00000290167.11	WNT4	ENSG00000162552	Wnt family member 4 Source HGNC Symbol Acc HGNC 12783
G11	SBH0548767	ENST00000264634.8	WNT5A	ENSG00000114251	Wnt family member 5A Source HGNC Symbol Acc HGNC 12784
G12	SBH0036122	ENST00000403532.7	XBP1	ENSG00000100219	X-box binding protein 1 Source HGNC Symbol Acc HGNC 12801
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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