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

Rat Estrogen Receptor Signaling

Cat. no. 249950 SBRN-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	Adora1	Ahr	Akap1	Apbb1	Bcar1	Bcl2l1	Bdnf	Bmp4	Bmp7	Brca1	C3	Cav1
B	Ccl12	Ccnd1	Cited2	Ckb	Ccn2	Ctsd	Cyp19a1	Cyp1a1	Ebag9	Efna5	Egr3	Erbb2
C	Erbb3	Esr1	Esr2	Fos	Foxa1	Fst	G6pd	Gper1	Hsp90aa1	Igf1	Igfbp4	Igfbp5
D	Irs1	Junb	Klkb1	L1cam	Lgals1	Lpl	Ltbp1	Maff	Med1	Mmp9	Mta1	Myc
E	Nab2	Ncoa2	Ncoa3	Ncor1	Ncor2	Ccn3	Nr0b1	Nr0b2	Nr2f6	AABR0703175 6.1	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	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1147673	ENSRNOT00000078993.1	Adora1	ENSRNOG00000003442	adenosine A1 receptor Source RGD Symbol Acc 2048
A02	SBR1103616	ENSRNOT00000006618.7	Ahr	ENSRNOG00000004342	aryl hydrocarbon receptor Source RGD Symbol Acc 2074
A03	SBR1169184	ENSRNOT00000055683.5	Akap1	ENSRNOG00000002373	A-kinase anchoring protein 1 Source RGD Symbol Acc 620826
A04	SBR1106924	ENSRNOT00000090181.1	Apbb1	ENSRNOG00000018020	amyloid beta precursor protein binding family B member 1 Source RGD Symbol Acc 2122
A05	SBR1129792	ENSRNOT00000058891.4	Bcar1	ENSRNOG00000019253	BCAR1, Cas family scaffold protein Source RGD Symbol Acc 2406
A06	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG00000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A07	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG00000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A08	SBR1132271	ENSRNOT00000012957.6	Bmp4	ENSRNOG00000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A09	SBR1093977	ENSRNOT00000084990.1	Bmp7	ENSRNOG00000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A10	SBR1185089	ENSRNOT00000028109.3	Brca1	ENSRNOG00000020701	BRCA1, DNA repair associated Source RGD Symbol Acc 2218
A11	SBR1177146	ENSRNOT00000073042.3	C3	ENSRNOG00000046834	complement C3 Source RGD Symbol Acc 2232
A12	SBR1108638	ENSRNOT00000078250.1	Cav1	ENSRNOG00000056836	caveolin 1 Source RGD Symbol Acc 2280
B01	SBR1129555	ENSRNOT00000031626.5	Ccl12	ENSRNOG00000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
B02	SBR1211432	ENSRNOT00000028411.3	Ccnd1	ENSRNOG00000020918	cyclin D1 Source RGD Symbol Acc 68384
B03	SBR1094010	ENSRNOT00000086790.1	Cited2	ENSRNOG00000056940	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 Source RGD Symbol Acc 620112
B04	SBR1209388	ENSRNOT00000015122.5	Ckb	ENSRNOG00000010872	creatine kinase B Source RGD Symbol Acc 2357
B05	SBR1133606	ENSRNOT00000089196.1	Ccn2	ENSRNOG00000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
B06	SBR1121073	ENSRNOT00000027407.4	Ctsd	ENSRNOG00000020206	cathepsin D Source RGD Symbol Acc 621511
B07	SBR1101306	ENSRNOT00000000212.7	Cyp19a1	ENSRNOG00000000196	cytochrome P450, family 19, subfamily a, polypeptide 1 Source RGD Symbol Acc 2457
B08	SBR1197501	ENSRNOT00000026473.4	Cyp1a1	ENSRNOG00000019500	cytochrome P450, family 1, subfamily a, polypeptide 1 Source RGD Symbol Acc 2458
B09	SBR1136110	ENSRNOT00000005705.5	Ebag9	ENSRNOG00000004220	estrogen receptor binding site associated, antigen, 9 Source RGD Symbol Acc 1307293
B10	SBR1205049	ENSRNOT00000045096.2	Efna5	ENSRNOG00000034177	ephrin A5 Source NCBI gene Acc 116683
B11	SBR1171630	ENSRNOT00000077072.2	Egr3	ENSRNOG00000017828	early growth response 3 Source RGD Symbol Acc 2545
B12	SBR1175639	ENSRNOT00000049070.3	Erbb2	ENSRNOG00000006450	erb-b2 receptor tyrosine kinase 2 Source RGD Symbol Acc 2561
C01	SBR1153467	ENSRNOT00000006796.4	Erbb3	ENSRNOG00000004964	erb-b2 receptor tyrosine kinase 3 Source RGD Symbol Acc 69323
C02	SBR1147622	ENSRNOT00000081017.1	Esr1	ENSRNOG00000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
C03	SBR1176994	ENSRNOT00000042682.4	Esr2	ENSRNOG00000005343	estrogen receptor 2 Source RGD Symbol Acc 2582
C04	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG00000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C05	SBR1205435	ENSRNOT00000009940.6	Foxa1	ENSRNOG00000009284	forkhead box A1 Source RGD Symbol Acc 2807
C06	SBR1138330	ENSRNOT00000015680.4	Fst	ENSRNOG00000011631	follistatin Source RGD Symbol Acc 2633
C07	SBR1179522	ENSRNOT00000080887.1	G6pd	ENSRNOG00000056728	glucose-6-phosphate dehydrogenase Source RGD Symbol Acc 2645
C08	SBR1129913	ENSRNOT00000001732.3	Gper1	ENSRNOG00000001287	G protein-coupled estrogen receptor 1 Source RGD Symbol Acc 619845
C09	SBR1113341	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG00000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
C10	SBR1185495	ENSRNOT00000038780.6	Igf1	ENSRNOG00000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1191354	014153.7	Igfbp4	000010635	insulin-like growth factor binding protein 4 Source RGD Symbol Acc 2875
C12	SBR1137301	ENSRNOT00000 079493.1	Igfbp5	ENSRNOG00 000017206	insulin-like growth factor binding protein 5 Source RGD Symbol Acc 2876
D01	SBR1132302	ENSRNOT00000 019579.5	Irs1	ENSRNOG00 000014597	insulin receptor substrate 1 Source RGD Symbol Acc 2922
D02	SBR1195750	ENSRNOT00000 067780.3	Junb	ENSRNOG00 000042838	JunB proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2944
D03	SBR1118567	ENSRNOT00000 019237.5	Klkb1	ENSRNOG00 000014118	kallikrein B1 Source RGD Symbol Acc 67382
D04	SBR1218544	ENSRNOT00000 080945.1	L1cam	ENSRNOG00 000061230	L1 cell adhesion molecule Source RGD Symbol Acc 619777
D05	SBR1170241	ENSRNOT00000 013538.6	Lgals1	ENSRNOG00 000009884	galectin 1 Source RGD Symbol Acc 69355
D06	SBR1197775	ENSRNOT00000 016543.3	Lpl	ENSRNOG00 000012181	lipoprotein lipase Source RGD Symbol Acc 3017
D07	SBR1138509	ENSRNOT00000 047674.4	Ltbp1	ENSRNOG00 000033090	latent transforming growth factor beta binding protein 1 Source RGD Symbol Acc 68379
D08	SBR1143548	ENSRNOT00000 017181.4	Maff	ENSRNOG00 000012886	MAF bZIP transcription factor F Source RGD Symbol Acc 1309531
D09	SBR1179730	ENSRNOT00000 067901.1	Med1	ENSRNOG00 000005606	mediator complex subunit 1 Source RGD Symbol Acc 1559552
D10	SBR1206750	ENSRNOT00000 023965.3	Mmp9	ENSRNOG00 000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
D11	SBR1101793	ENSRNOT00000 006521.6	Mta1	ENSRNOG00 000004711	metastasis associated 1 Source RGD Symbol Acc 621018
D12	SBR1106364	ENSRNOT00000 006188.5	Myc	ENSRNOG00 000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E01	SBR1197972	ENSRNOT00000 057745.3	Nab2	ENSRNOG00 000008415	Ngfi-A binding protein 2 Source RGD Symbol Acc 1311712
E02	SBR1179703	ENSRNOT00000 011026.5	Ncoa2	ENSRNOG00 000007975	nuclear receptor coactivator 2 Source RGD Symbol Acc 620108
E03	SBR1162814	ENSRNOT00000 007768.7	Ncoa3	ENSRNOG00 000005616	nuclear receptor coactivator 3 Source RGD Symbol Acc 620109
E04	SBR1154337	ENSRNOT00000 081409.1	Ncor1	ENSRNOG00 000055246	nuclear receptor co-repressor 1 Source RGD Symbol Acc 3612
E05	SBR1170228	ENSRNOT00000 001334.6	Ncor2	ENSRNOG00 000001004	nuclear receptor co-repressor 2 Source RGD Symbol Acc 1310293
E06	SBR1191682	ENSRNOT00000 011904.5	Ccn3	ENSRNOG00 000008697	cellular communication network factor 3 Source RGD Symbol Acc 621553
E07	SBR1165096	ENSRNOT00000 005023.4	Nr0b1	ENSRNOG00 000003765	nuclear receptor subfamily 0, group B, member 1 Source RGD Symbol Acc 62028
E08	SBR1166182	ENSRNOT00000 009683.2	Nr0b2	ENSRNOG00 000007229	nuclear receptor subfamily 0, group B, member 2 Source RGD Symbol Acc 621032
E09	SBR1125209	ENSRNOT00000 022898.3	Nr2f6	ENSRNOG00 000016892	nuclear receptor subfamily 2, group F, member 6 Source RGD Symbol Acc 621685
E10	SBR1127733	ENSRNOT00000 044287.4	AABR0703 1756.1	ENSRNOG00 000014096	nuclear receptor subfamily 3, group C, member 1 Source NCBI gene Acc 24413
E11	SBR1127927	ENSRNOT00000 000812.5	Nr5a2	ENSRNOG00 000000653	nuclear receptor subfamily 5, group A, member 2 Source RGD Symbol Acc 68353
E12	SBR1218513	ENSRNOT00000 002152.3	Nrip1	ENSRNOG00 000001585	nuclear receptor interacting protein 1 Source RGD Symbol Acc 1311850
F01	SBR1157725	ENSRNOT00000 014492.5	Nrp1	ENSRNOG00 000010744	neuropilin 1 Source RGD Symbol Acc 621588
F02	SBR1143188	ENSRNOT00000 000107.6	Pdzk1	ENSRNOG00 000000096	PDZ domain containing 1 Source RGD Symbol Acc 70924
F03	SBR1103849	ENSRNOT00000 026102.6	Pelp1	ENSRNOG00 000019268	proline, glutamate and leucine rich protein 1 Source RGD Symbol Acc 1306320
F04	SBR1178528	ENSRNOT00000 038313.4	Pgr	ENSRNOG00 000006831	progesterone receptor Source RGD Symbol Acc 3317
F05	SBR1104228	ENSRNOT00000 017472.7	Phb2	ENSRNOG00 000012999	prohibitin 2 Source RGD Symbol Acc 620203
F06	SBR1146307	ENSRNOT00000 026287.5	Ptch1	ENSRNOG00 000019354	patched 1 Source RGD Symbol Acc 621425
F07	SBR1122148	ENSRNOT00000 003567.4	Ptgs2	ENSRNOG00 000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
F08	SBR1110595	ENSRNOT00000 018190.4	Rala	ENSRNOG00 000013454	RAS like proto-oncogene A Source RGD Symbol Acc 619851
F09	SBR1208213	ENSRNOT00000 008659.4	Rara	ENSRNOG00 000009972	retinoic acid receptor, alpha Source RGD Symbol Acc 3534
F10	SBR1171045	ENSRNOT00000 015612.5	S100a6	ENSRNOG00 000011647	S100 calcium binding protein A6 Source RGD Symbol Acc 620264

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1151137	ENSRNOT00000089164.1	Safb	ENSRNOG00000050543	scaffold attachment factor B Source RGD Symbol Acc 620613
F12	SBR1162553	ENSRNOT00000077581.1	Snai1	ENSRNOG00000009594	snail family transcriptional repressor 1 Source RGD Symbol Acc 620758
G01	SBR1139184	ENSRNOT00000003940.3	Socs3	ENSRNOG00000002946	suppressor of cytokine signaling 3 Source RGD Symbol Acc 621087
G02	SBR1210860	ENSRNOT00000075989.1	Spp1	ENSRNOG00000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
G03	SBR1152431	ENSRNOT00000001538.1	Tff1	ENSRNOG00000001164	trefoil factor 1 Source RGD Symbol Acc 620707
G04	SBR1118717	ENSRNOT00000057441.4	Tgfa	ENSRNOG00000016182	transforming growth factor alpha Source RGD Symbol Acc 3849
G05	SBR1115193	ENSRNOT00000013516.5	Tgfb3	ENSRNOG00000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G06	SBR1160692	ENSRNOT00000083351.1	Thbs1	ENSRNOG00000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G07	SBR1167735	ENSRNOT00000082429.1	Vdr	ENSRNOG00000054420	vitamin D receptor Source RGD Symbol Acc 3959
G08	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG00000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G09	SBR1169669	ENSRNOT00000014346.6	Ccn5	ENSRNOG00000010666	cellular communication network factor 5 Source RGD Symbol Acc 621867
G10	SBR1203603	ENSRNOT00000018064.5	Wnt4	ENSRNOG00000013166	Wnt family member 4 Source RGD Symbol Acc 621348
G11	SBR1212833	ENSRNOT00000021164.3	Wnt5a	ENSRNOG00000015618	Wnt family member 5A Source RGD Symbol Acc 69250
G12	SBR1176433	ENSRNOT00000014044.6	Xbp1	ENSRNOG00000010298	X-box binding protein 1 Source RGD Symbol Acc 1303073
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	SBR1218555	Sybr_RGDC	RGDC	Sybr_RGDC	Rat 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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