

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

Rat Insulin Resistance

Cat. no. 249950 SBRN-156ZR

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	Acaca	Acacb	Acs1l	Acs14	Adipoq	Adipor1	Adipor2	Akt3	Alox5	Apoe	Casp1	Ccl12
B	Ccr4	Ccr5	Ccr6	RGD1565355	Cd3e	Cebpa	Chuk	Cnbp	Crtf2	Cs	Cxcr3	Cxcr4
C	Adgre1	Fabp4	Fasn	Cys1	Hk2	Ifng	Igf1	Igf1r	Ilkbb	Il18r1	Il1b	Il1r1
D	Il23r	Il6	Insr	Irs1	Irs2	Jak2	Lep	Lepr	Lipe	Lpl	Lta4h	Map2k1
E	Mapk3	Mapk9	Mtor	Nampt	Nfkbia	Nlrp3	Olr1	Pck1	Pde3b	Pdk2	Pdx1	Pik3ca
F	Pik3r1	Ppara	Pparg	Ppargc1a	Ptpn1	Pycard	Rbp4	Rela	Retn	Rps6kb1	Scd1	Serpine1
G	Slc27a1	Slc2a4	Socs3	Srebf1	Srebf2	Slat3	Tlr4	LOC103694380	Tnfrsf1a	Tnfrsf1b	Ucp1	Vldlr
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	SBR1187866	ENSRNOT00000088138.1	Acaca	ENSRNOG0000034013	acetyl-CoA carboxylase alpha Source RGD Symbol Acc 621248
A02	SBR1144863	ENSRNOT00000000821.6	Acacb	ENSRNOG0000000658	acetyl-CoA carboxylase beta Source RGD Symbol Acc 620500
A03	SBR1160500	ENSRNOT00000014235.3	Acs1	ENSRNOG0000010633	acyl-CoA synthetase long-chain family member 1 Source RGD Symbol Acc 2015
A04	SBR1194850	ENSRNOT00000026057.6	Acs14	ENSRNOG0000019180	acyl-CoA synthetase long-chain family member 4 Source RGD Symbol Acc 69401
A05	SBR1209814	ENSRNOT00000002492.5	Adipoq	ENSRNOG0000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A06	SBR1163886	ENSRNOT00000005551.4	Adipor1	ENSRNOG0000004143	adiponectin receptor 1 Source RGD Symbol Acc 1303151
A07	SBR1107135	ENSRNOT00000010556.5	Adipor2	ENSRNOG0000007990	adiponectin receptor 2 Source RGD Symbol Acc 1307891
A08	SBR1132835	ENSRNOT000000085648.1	Akt3	ENSRNOG0000021497	AKT serine/threonine kinase 3 Source RGD Symbol Acc 62390
A09	SBR1113879	ENSRNOT00000017633.5	Alox5	ENSRNOG0000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
A10	SBR1123572	ENSRNOT000000080453.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A11	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
A12	SBR1129555	ENSRNOT000000031626.5	Ccl12	ENSRNOG0000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
B01	SBR1113127	ENSRNOT00000013705.3	Ccr4	ENSRNOG0000010315	C-C motif chemokine receptor 4 Source RGD Symbol Acc 620594
B02	SBR1129600	ENSRNOT000000082774.1	Ccr5	ENSRNOG00000049115	C-C motif chemokine receptor 5 Source RGD Symbol Acc 620596
B03	SBR1172047	ENSRNOT00000017302.6	Ccr6	ENSRNOG0000012964	C-C motif chemokine receptor 6 Source RGD Symbol Acc 1308562
B04	SBR1160418	ENSRNOT000000076573.2	RGD1565355	ENSRNOG0000040108	similar to fatty acid translocase/CD36 Source RGD Symbol Acc 1565355
B05	SBR1196726	ENSRNOT000000091190.1	Cd3e	ENSRNOG0000016069	CD3e molecule Source RGD Symbol Acc 1309222
B06	SBR1144323	ENSRNOT00000014517.5	Cebpa	ENSRNOG0000010918	CCAAT/enhancer binding protein alpha Source RGD Symbol Acc 2326
B07	SBR1132111	ENSRNOT000000030782.4	Chuk	ENSRNOG0000022485	conserved helix-loop-helix ubiquitous kinase Source RGD Symbol Acc 1306661
B08	SBR1139311	ENSRNOT00000013884.6	Cnbp	ENSRNOG0000010239	CCHC-type zinc finger, nucleic acid binding protein Source RGD Symbol Acc 621807
B09	SBR1148850	ENSRNOT000000075656.1	Cr1f2	ENSRNOG0000049828	cytokine receptor-like factor 2 Source RGD Symbol Acc 621078
B10	SBR1131298	ENSRNOT000000033726.5	Cs	ENSRNOG0000023520	citrate synthase Source RGD Symbol Acc 620330
B11	SBR1150044	ENSRNOT000000076210.1	Cxcr3	ENSRNOG0000003305	C-X-C motif chemokine receptor 3 Source RGD Symbol Acc 621528
B12	SBR1129817	ENSRNOT000000005143.6	Cxcr4	ENSRNOG0000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
C01	SBR1102588	ENSRNOT000000073926.2	Adgre1	ENSRNOG0000046254	adhesion G protein-coupled receptor E1 Source RGD Symbol Acc 1359214
C02	SBR1104159	ENSRNOT000000077311.1	Fabp4	ENSRNOG0000010805	fatty acid binding protein 4 Source RGD Symbol Acc 69309
C03	SBR1216475	ENSRNOT000000073321.2	Fasn	ENSRNOG0000045636	fatty acid synthase Source RGD Symbol Acc 620665
C04	SBR1135273	ENSRNOT000000028271.3	Gys1	ENSRNOG0000020812	glycogen synthase 1 Source RGD Symbol Acc 1589798
C05	SBR1148823	ENSRNOT000000008813.3	Hk2	ENSRNOG0000006116	hexokinase 2 Source RGD Symbol Acc 2797
C06	SBR1108917	ENSRNOT000000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
C07	SBR1185495	ENSRNOT000000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
C08	SBR1109208	ENSRNOT000000019267.6	Igf1r	ENSRNOG0000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
C09	SBR1133299	ENSRNOT000000025851.4	Ikbkb	ENSRNOG0000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
C10	SBR1139098	ENSRNOT000000020194.7	Il18r1	ENSRNOG0000015027	interleukin 18 receptor 1 Source RGD Symbol Acc 1308589
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1196387	006308.4	Il1b	000004649	interleukin 1 beta Source RGD Symbol Acc 2891
C12	SBR1113457	ENSRNOT00000019673.4	Il1r1	ENSRNOG0000014504	interleukin 1 receptor type 1 Source RGD Symbol Acc 2892
D01	SBR1118555	ENSRNOT00000010151.5	Il23r	ENSRNOG0000007544	interleukin 23 receptor Source RGD Symbol Acc 1586368
D02	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
D03	SBR1131460	ENSRNOT00000041155.3	Insr	ENSRNOG0000029986	insulin receptor Source RGD Symbol Acc 2917
D04	SBR1132302	ENSRNOT00000019579.5	Irs1	ENSRNOG0000014597	insulin receptor substrate 1 Source RGD Symbol Acc 2922
D05	SBR1110764	ENSRNOT00000032918.6	Irs2	ENSRNOG0000023509	insulin receptor substrate 2 Source RGD Symbol Acc 69316
D06	SBR1191640	ENSRNOT00000087011.1	Jak2	ENSRNOG0000059968	Janus kinase 2 Source RGD Symbol Acc 2939
D07	SBR1209536	ENSRNOT00000071926.1	Lep	ENSRNOG0000045797	leptin Source RGD Symbol Acc 3000
D08	SBR1152097	ENSRNOT00000093574.1	Lepr	ENSRNOG0000023664	leptin receptor Source RGD Symbol Acc 3001
D09	SBR1104445	ENSRNOT00000027910.2	Lipe	ENSRNOG0000020546	lipase E, hormone sensitive type Source RGD Symbol Acc 3010
D10	SBR1197775	ENSRNOT00000016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
D11	SBR1174243	ENSRNOT00000005930.4	Lta4h	ENSRNOG0000004494	leukotriene A4 hydrolase Source RGD Symbol Acc 1311333
D12	SBR1111011	ENSRNOT00000013933.6	Map2k1	ENSRNOG0000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
E01	SBR1209281	ENSRNOT00000087625.1	Mapk3	ENSRNOG0000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
E02	SBR1169613	ENSRNOT00000004010.4	Mapk9	ENSRNOG0000002823	mitogen-activated protein kinase 9 Source RGD Symbol Acc 628847
E03	SBR1220576	ENSRNOT00000014167.7	Mtor	ENSRNOG0000009615	mechanistic target of rapamycin kinase Source RGD Symbol Acc 68371
E04	SBR1212040	ENSRNOT00000013043.6	Nampt	ENSRNOG0000009754	nicotinamide phosphoribosyltransferase Source RGD Symbol Acc 631365
E05	SBR1120974	ENSRNOT00000009894.6	Nfkbia	ENSRNOG0000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E06	SBR1186072	ENSRNOT00000004280.5	Nlrp3	ENSRNOG0000003170	NLR family, pyrin domain containing 3 Source RGD Symbol Acc 1308314
E07	SBR1156006	ENSRNOT00000086390.1	Olr1	ENSRNOG0000056219	oxidized low density lipoprotein receptor 1 Source RGD Symbol Acc 620515
E08	SBR1109122	ENSRNOT00000031586.6	Pck1	ENSRNOG0000028616	phosphoenolpyruvate carboxykinase 1 Source RGD Symbol Acc 3267
E09	SBR1185352	ENSRNOT00000015498.4	Pde3b	ENSRNOG0000011417	phosphodiesterase 3B Source RGD Symbol Acc 61943
E10	SBR1216150	ENSRNOT00000005641.6	Pdk2	ENSRNOG0000004172	pyruvate dehydrogenase kinase 2 Source RGD Symbol Acc 69428
E11	SBR1185476	ENSRNOT00000071942.1	Pdx1	ENSRNOG0000046458	pancreatic and duodenal homeobox 1 Source RGD Symbol Acc 62387
E12	SBR1193587	ENSRNOT00000083720.1	Pik3ca	ENSRNOG0000056371	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha Source RGD Symbol Acc 620916
F01	SBR1155861	ENSRNOT00000025687.7	Pik3r1	ENSRNOG0000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
F02	SBR1163064	ENSRNOT00000078928.1	Ppara	ENSRNOG0000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
F03	SBR1131520	ENSRNOT00000082969.1	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F04	SBR1191958	ENSRNOT00000006071.5	Ppargc1a	ENSRNOG0000004473	PPARG coactivator 1 alpha Source RGD Symbol Acc 620925
F05	SBR1146496	ENSRNOT00000014309.4	Ptpn1	ENSRNOG0000010574	protein tyrosine phosphatase, non-receptor type 1 Source RGD Symbol Acc 61965
F06	SBR1158649	ENSRNOT00000026699.4	Pycard	ENSRNOG0000019675	PYD and CARD domain containing Source RGD Symbol Acc 628637
F07	SBR1124636	ENSRNOT00000021055.7	Rbp4	ENSRNOG0000015518	retinol binding protein 4 Source RGD Symbol Acc 3546
F08	SBR1138204	ENSRNOT00000045233.3	Rela	ENSRNOG0000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
F09	SBR1120413	ENSRNOT00000091197.1	Retn	ENSRNOG0000001001	resistin Source RGD Symbol Acc 628781
F10	SBR1105085	ENSRNOT00000005226.4	Rps6kb1	ENSRNOG0000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1116635	ENSRNOT00000018447.5	Scd	ENSRNOG0000013552	stearoyl-CoA desaturase Source RGD Symbol Acc 621176
F12	SBR1126485	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
G01	SBR1215227	ENSRNOT00000024659.4	Slc27a1	ENSRNOG0000018170	solute carrier family 27 member 1 Source RGD Symbol Acc 620927
G02	SBR1096562	ENSRNOT00000023256.5	Slc2a4	ENSRNOG0000017226	solute carrier family 2 member 4 Source RGD Symbol Acc 2711
G03	SBR1139184	ENSRNOT00000003940.3	Socs3	ENSRNOG0000002946	suppressor of cytokine signaling 3 Source RGD Symbol Acc 621087
G04	SBR1114531	ENSRNOT00000047053.6	Srebf1	ENSRNOG0000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G05	SBR1106475	ENSRNOT00000056041.2	Srebf2	ENSRNOG0000007400	sterol regulatory element binding transcription factor 2 Source RGD Symbol Acc 1307751
G06	SBR1138417	ENSRNOT00000026760.4	Stat3	ENSRNOG0000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
G07	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G08	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G09	SBR1130829	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG0000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G10	SBR1111098	ENSRNOT00000022478.4	Tnfrsf1b	ENSRNOG0000016575	TNF receptor superfamily member 1B Source RGD Symbol Acc 621238
G11	SBR1129529	ENSRNOT00000004900.4	Ucp1	ENSRNOG0000003580	uncoupling protein 1 Source RGD Symbol Acc 3931
G12	SBR1213919	ENSRNOT00000035814.3	Vldlr	ENSRNOG0000027491	very low density lipoprotein receptor Source RGD Symbol Acc 3963
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	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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