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

Rat Adipogenesis

Cat. no. 249950 SBRN-049ZA

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	Acacb	Adipoq	Adrb2	Agt	Angpt2	Creb5	Bmp2	Bmp4	Bmp7	Ccnd1	Cdk4	Cdkn1a
B	Cdkn1b	Cebpa	Cebpb	Cebpd	Cfd	Creb1	Ddit3	AC118957.1	Dkk1	Dlk1	E2f1	Egr2
C	Fabp4	Fasn	Fgf1	Fgf10	Fgf2	Fos	Foxc2	Gata2	Gata3	Hes1	Insr	Irs1
D	Irs2	Jun	Klf15	Klf2	Klf3	Klf4	Lep	Lipe	Lmna	Lpl	Lrp5	Mapk14
E	Ncoa2	Ncor1	Ncor2	Nr0b2	Nr1h3	Nrf1	Ppara	Ppard	Pparg	Ppargc1a	Ppargc1b	Rb1
F	Retn	Runx1t1	Rxra	Sfrp1	Sfrp5	Shh	AABR0704492 5.1	Sirt2	Sirt3	Slc2a4	Src	Srebf1
G	Stat5a	Taz	Tcf7l2	Tsc22d3	Twist1	Ucp1	Vdr	Wnt1	Wnt10b	Wnt3a	Wnt5a	Wnt5b
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	SBR1144863	ENSRNOT00000000821.6	Acacb	ENSRNOG00000000658	acetyl-CoA carboxylase beta Source RGD Symbol Acc 620500
A02	SBR1209814	ENSRNOT00000002492.5	Adipoq	ENSRNOG00000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A03	SBR1208091	ENSRNOT00000026098.3	Adrb2	ENSRNOG00000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A04	SBR1195605	ENSRNOT00000024917.4	Agt	ENSRNOG00000018445	angiotensinogen Source RGD Symbol Acc 2069
A05	SBR1190070	ENSRNOT00000022774.6	Angpt2	ENSRNOG00000016696	angiopoietin 2 Source RGD Symbol Acc 621861
A06	SBR1142100	ENSRNOT00000031365.5	Creb5	ENSRNOG00000008622	cAMP responsive element binding protein 5 Source RGD Symbol Acc 1566107
A07	SBR1127251	ENSRNOT00000028904.4	Bmp2	ENSRNOG00000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
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	SBR1211432	ENSRNOT00000028411.3	Ccnd1	ENSRNOG00000020918	cyclin D1 Source RGD Symbol Acc 68384
A11	SBR1175190	ENSRNOT00000031796.4	Cdk4	ENSRNOG00000025602	cyclin-dependent kinase 4 Source RGD Symbol Acc 621120
A12	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG00000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B01	SBR1124365	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG00000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
B02	SBR1144323	ENSRNOT00000014517.5	Cebpa	ENSRNOG00000010918	CCAAT/enhancer binding protein alpha Source RGD Symbol Acc 2326
B03	SBR1114232	ENSRNOT00000083876.1	Cebpb	ENSRNOG00000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
B04	SBR1129981	ENSRNOT00000074586.2	Cebpd	ENSRNOG00000050869	CCAAT/enhancer binding protein delta Source RGD Symbol Acc 2328
B05	SBR1215139	ENSRNOT00000015029.4	Cfd	ENSRNOG00000033564	complement factor D Source RGD Symbol Acc 2498
B06	SBR1179341	ENSRNOT00000049654.4	Creb1	ENSRNOG00000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B07	SBR1210119	ENSRNOT00000083472.1	Ddit3	ENSRNOG00000006789	DNA-damage inducible transcript 3 Source RGD Symbol Acc 62391
B08	SBR1213889	ENSRNOT00000005162.3	AC118957.1	ENSRNOG00000003891	Putative preoptic regulatory factor 1 Source UniProtKB/Swiss-Prot Acc P18889
B09	SBR1171972	ENSRNOT00000015771.7	Dkk1	ENSRNOG00000011692	dickkopf WNT signaling pathway inhibitor 1 Source RGD Symbol Acc 1307313
B10	SBR1102845	ENSRNOT00000006339.6	Dlk1	ENSRNOG00000019584	delta like non-canonical Notch ligand 1 Source RGD Symbol Acc 619931
B11	SBR1191846	ENSRNOT00000022428.6	E2f1	ENSRNOG00000016708	N-terminal EF-hand calcium binding protein 3 Source RGD Symbol Acc 1310124
B12	SBR1213007	ENSRNOT00000000792.4	Egr2	ENSRNOG00000000640	early growth response 2 Source RGD Symbol Acc 621608
C01	SBR1104159	ENSRNOT00000077311.1	Fabp4	ENSRNOG00000010805	fatty acid binding protein 4 Source RGD Symbol Acc 69309
C02	SBR1216475	ENSRNOT00000073321.2	Fasn	ENSRNOG00000045636	fatty acid synthase Source RGD Symbol Acc 620665
C03	SBR1111274	ENSRNOT00000087408.1	Fgf1	ENSRNOG00000013867	fibroblast growth factor 1 Source RGD Symbol Acc 2605
C04	SBR1145306	ENSRNOT00000016485.3	Fgf10	ENSRNOG00000012278	fibroblast growth factor 10 Source RGD Symbol Acc 2606
C05	SBR1185708	ENSRNOT00000023388.5	Fgf2	ENSRNOG00000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C06	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG00000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C07	SBR1124840	ENSRNOT00000072369.1	Foxc2	ENSRNOG00000047446	forkhead box C2 Source RGD Symbol Acc 621703
C08	SBR1149219	ENSRNOT00000017240.2	Gata2	ENSRNOG00000012347	GATA binding protein 2 Source RGD Symbol Acc 2664
C09	SBR1158985	ENSRNOT00000026187.5	Gata3	ENSRNOG00000019336	GATA binding protein 3 Source RGD Symbol Acc 621250
C10	SBR1103177	ENSRNOT00000002346.7	Hes1	ENSRNOG00000001720	hes family bHLH transcription factor 1 Source RGD Symbol Acc 62081
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1131460	041155.3	Insr	000029986	insulin receptor Source RGD Symbol Acc 2917
C12	SBR1132302	ENSRNOT00000019579.5	Irs1	ENSRNOG00000014597	insulin receptor substrate 1 Source RGD Symbol Acc 2922
D01	SBR1110764	ENSRNOT00000032918.6	Irs2	ENSRNOG00000023509	insulin receptor substrate 2 Source RGD Symbol Acc 69316
D02	SBR1133226	ENSRNOT00000011731.3	Jun	ENSRNOG00000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D03	SBR1129956	ENSRNOT00000024011.5	Klf15	ENSRNOG00000017808	Kruppel-like factor 15 Source RGD Symbol Acc 70918
D04	SBR1208407	ENSRNOT00000019052.2	Klf2	ENSRNOG00000014205	Kruppel-like factor 2 Source RGD Symbol Acc 1359220
D05	SBR1213400	ENSRNOT00000002960.6	Klf3	ENSRNOG00000002163	Kruppel like factor 3 Source RGD Symbol Acc 1593290
D06	SBR1105877	ENSRNOT00000022255.3	Klf4	ENSRNOG00000016299	Kruppel like factor 4 Source RGD Symbol Acc 621445
D07	SBR1209536	ENSRNOT00000071926.1	Lep	ENSRNOG00000045797	leptin Source RGD Symbol Acc 3000
D08	SBR1104445	ENSRNOT00000027910.2	Lipe	ENSRNOG00000020546	lipase E, hormone sensitive type Source RGD Symbol Acc 3010
D09	SBR1110172	ENSRNOT00000082174.1	Lmna	ENSRNOG00000019638	lamin A/C Source RGD Symbol Acc 620456
D10	SBR1197775	ENSRNOT00000016543.3	Lpl	ENSRNOG00000012181	lipoprotein lipase Source RGD Symbol Acc 3017
D11	SBR1166179	ENSRNOT00000022213.7	Lrp5	ENSRNOG00000015911	LDL receptor related protein 5 Source RGD Symbol Acc 1309329
D12	SBR1149566	ENSRNOT00000000618.6	Mapk14	ENSRNOG00000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
E01	SBR1179703	ENSRNOT00000011026.5	Ncoa2	ENSRNOG00000007975	nuclear receptor coactivator 2 Source RGD Symbol Acc 620108
E02	SBR1154337	ENSRNOT00000081409.1	Ncor1	ENSRNOG00000055246	nuclear receptor co-repressor 1 Source RGD Symbol Acc 3612
E03	SBR1170228	ENSRNOT00000001334.6	Ncor2	ENSRNOG00000001004	nuclear receptor co-repressor 2 Source RGD Symbol Acc 1310293
E04	SBR1166182	ENSRNOT00000009683.2	Nr0b2	ENSRNOG00000007229	nuclear receptor subfamily 0, group B, member 2 Source RGD Symbol Acc 621032
E05	SBR1117087	ENSRNOT00000018154.5	Nr1h3	ENSRNOG00000013172	nuclear receptor subfamily 1, group H, member 3 Source RGD Symbol Acc 61909
E06	SBR1198048	ENSRNOT00000080173.1	Nrf1	ENSRNOG00000008752	nuclear respiratory factor 1 Source RGD Symbol Acc 1304603
E07	SBR1163064	ENSRNOT00000078928.1	Ppara	ENSRNOG00000021463	peroxisome proliferator activated receptor alpha Source RGD Symbol Acc 3369
E08	SBR1197924	ENSRNOT00000083109.1	Ppard	ENSRNOG00000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
E09	SBR1131520	ENSRNOT00000082969.1	Pparg	ENSRNOG00000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
E10	SBR1191958	ENSRNOT00000006071.5	Ppargc1a	ENSRNOG00000004473	PPARG coactivator 1 alpha Source RGD Symbol Acc 620925
E11	SBR1109181	ENSRNOT00000066048.3	Ppargc1b	ENSRNOG00000017503	PPARG coactivator 1 beta Source RGD Symbol Acc 727948
E12	SBR1123205	ENSRNOT00000021752.5	Rb1	ENSRNOG00000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F01	SBR1120413	ENSRNOT00000091197.1	Retn	ENSRNOG00000001001	resistin Source RGD Symbol Acc 628781
F02	SBR1117065	ENSRNOT00000078102.1	Runx1t1	ENSRNOG00000005673	RUNX1 translocation partner 1 Source RGD Symbol Acc 1305490
F03	SBR1218516	ENSRNOT00000012892.4	Rxra	ENSRNOG00000009446	retinoid X receptor alpha Source RGD Symbol Acc 3610
F04	SBR1098532	ENSRNOT00000024128.6	Sfrp1	ENSRNOG00000017783	secreted frizzled-related protein 1 Source RGD Symbol Acc 621074
F05	SBR1213355	ENSRNOT00000020182.5	Sfrp5	ENSRNOG00000014940	secreted frizzled-related protein 5 Source RGD Symbol Acc 1310369
F06	SBR1130647	ENSRNOT00000008497.2	Shh	ENSRNOG00000006120	sonic hedgehog signaling molecule Source RGD Symbol Acc 3673
F07	SBR1134550	ENSRNOT00000078739.1	AABR07044925.1	ENSRNOG00000051592	sirtuin 1 Source NCBI gene Acc 309757
F08	SBR1153037	ENSRNOT00000064153.1	Sirt2	ENSRNOG00000020102	sirtuin 2 Source RGD Symbol Acc 621481
F09	SBR1173975	ENSRNOT00000018861.6	Sirt3	ENSRNOG00000013828	sirtuin 3 Source RGD Symbol Acc 1308374
F10	SBR1096562	ENSRNOT00000023256.5	Slc2a4	ENSRNOG00000017226	solute carrier family 2 member 4 Source RGD Symbol Acc 2711

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1192294	ENSRNOT00000012739.4	Src	ENSRNOG00000009495	SRC proto-oncogene, non-receptor tyrosine kinase Source RGD Symbol Acc 620795
F12	SBR1114531	ENSRNOT00000047053.6	Srebf1	ENSRNOG00000003463	sterol regulatory element binding transcription factor 1 Source RGD Symbol Acc 69423
G01	SBR1147063	ENSRNOT00000026662.3	Stat5a	ENSRNOG00000019496	signal transducer and activator of transcription 5A Source RGD Symbol Acc 3773
G02	SBR1121508	ENSRNOT00000089778.1	Taz	ENSRNOG00000053023	tafazzin Source RGD Symbol Acc 1588532
G03	SBR1184563	ENSRNOT00000019681.6	Tcf7l2	ENSRNOG00000049232	transcription factor 7 like 2 Source RGD Symbol Acc 1583621
G04	SBR1123278	ENSRNOT00000085118.1	Tsc22d3	ENSRNOG00000056135	TSC22 domain family, member 3 Source RGD Symbol Acc 621654
G05	SBR1200999	ENSRNOT00000014763.6	Twist1	ENSRNOG00000011101	twist family bHLH transcription factor 1 Source RGD Symbol Acc 621455
G06	SBR1129529	ENSRNOT00000004900.4	Ucp1	ENSRNOG00000003580	uncoupling protein 1 Source RGD Symbol Acc 3931
G07	SBR1167735	ENSRNOT00000082429.1	Vdr	ENSRNOG00000054420	vitamin D receptor Source RGD Symbol Acc 3959
G08	SBR1167539	ENSRNOT00000090156.1	Wnt1	ENSRNOG00000061818	Wnt family member 1 Source RGD Symbol Acc 1597195
G09	SBR1106181	ENSRNOT00000081468.1	Wnt10b	ENSRNOG00000061238	Wnt family member 10B Source RGD Symbol Acc 1304988
G10	SBR1178408	ENSRNOT00000064505.3	Wnt3a	ENSRNOG00000003039	Wnt family member 3A Source RGD Symbol Acc 1308057
G11	SBR1212833	ENSRNOT00000021164.3	Wnt5a	ENSRNOG00000015618	Wnt family member 5A Source RGD Symbol Acc 69250
G12	SBR1206664	ENSRNOT00000011044.4	Wnt5b	ENSRNOG00000008168	Wnt family member 5B Source RGD Symbol Acc 628850
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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