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

Rat Aging

Cat. no. 249950 SBRN-178ZA

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	Angel2	Anxa3	Anxa5	Arid1a	Arl6ip6	Bub1b	C1qa	C1qb	C1qc	C1s	C3	C3ar1
B	C4a	C4b	C5ar1	Calb1	Casp1	Ccr1	Cd14	Cd163	Cdkn1c	Cfh	Cfhr1	Clu
C	Col1a1	Cx3cl1	Cxcl16	Elavl1	Eml1	AABR07058539.1	Fbxl16	Fcer1g	Fcgbp	Fcgr1a	Fcgr2a	Fcgr2b
D	Foxo1	Gfap	Hsf1	Jakmip3	Lmna	Lmnb1	Lmnb2	Elp3	Lsm5	Ltf	Lyzl1	Mbp
E	Mrpl43	Ndufb11	Panx1	Pdcd6	Phf3	Polrmt	Pot1	Rap1a	Wrn	Rnf144b	S100a8	S100a9
F	Scn2b	Sirt3	Sirt6	Smad2	AABR07053516.1	Terf1	Terf2	Tfam	Tfb1m	Tfb2m	Tinf2	Tlr2
G	Tlr4	Tmem135	Tmem33	Tollip	Tpp1	Txnip	Vps13c	LOC108348048	Zbtb10	Zfp9	Zfr	Zmpste24
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	SBR1137569	ENSRNOT00000005084.7	Angel2	ENSRNOG00000003795	angel homolog 2 Source RGD Symbol Acc 1305056
A02	SBR1177339	ENSRNOT00000068134.3	Anxa3	ENSRNOG00000002045	annexin A3 Source RGD Symbol Acc 2119
A03	SBR1096992	ENSRNOT00000019554.6	Anxa5	ENSRNOG00000014453	annexin A5 Source RGD Symbol Acc 2120
A04	SBR1140511	ENSRNOT00000009173.7	Arid1a	ENSRNOG00000006137	AT-rich interaction domain 1A Source RGD Symbol Acc 1310500
A05	SBR1137265	ENSRNOT00000006774.6	Arl6ip6	ENSRNOG00000005074	ADP ribosylation factor like GTPase 6 interacting protein 6 Source RGD Symbol Acc 1564819
A06	SBR1123466	ENSRNOT00000010406.6	Bub1b	ENSRNOG00000007906	BUB1 mitotic checkpoint serine/threonine kinase B Source RGD Symbol Acc 619791
A07	SBR1199356	ENSRNOT00000017385.6	C1qa	ENSRNOG00000012807	complement C1q A chain Source RGD Symbol Acc 1306716
A08	SBR1128401	ENSRNOT00000017060.6	C1qb	ENSRNOG00000012749	complement C1q B chain Source RGD Symbol Acc 2229
A09	SBR1161844	ENSRNOT00000017065.5	C1qc	ENSRNOG00000012804	complement C1q C chain Source RGD Symbol Acc 1306828
A10	SBR1197918	ENSRNOT00000056058.4	C1s	ENSRNOG00000011971	complement C1s Source RGD Symbol Acc 619983
A11	SBR1177146	ENSRNOT00000073042.3	C3	ENSRNOG00000046834	complement C3 Source RGD Symbol Acc 2232
A12	SBR1098290	ENSRNOT00000012216.3	C3ar1	ENSRNOG00000009211	complement C3a receptor 1 Source RGD Symbol Acc 620537
B01	SBR1182212	ENSRNOT00000072377.2	C4a	ENSRNOG00000047657	complement C4A Source RGD Symbol Acc 620005
B02	SBR1100936	ENSRNOT00000031704.6	C4b	ENSRNOG00000030729	complement C4B (Chido blood group) Source RGD Symbol Acc 1591983
B03	SBR1123773	ENSRNOT00000073034.2	C5ar1	ENSRNOG00000047800	complement C5a receptor 1 Source RGD Symbol Acc 70553
B04	SBR1136350	ENSRNOT00000010845.4	Calb1	ENSRNOG00000007456	calbindin 1 Source RGD Symbol Acc 69340
B05	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG00000007372	caspase 1 Source RGD Symbol Acc 2274
B06	SBR1135029	ENSRNOT00000008772.4	Ccr1	ENSRNOG00000006715	C-C motif chemokine receptor 1 Source RGD Symbol Acc 708446
B07	SBR1200939	ENSRNOT00000023977.6	Cd14	ENSRNOG00000017819	CD14 molecule Source RGD Symbol Acc 620588
B08	SBR1207838	ENSRNOT00000084588.1	Cd163	ENSRNOG00000010253	CD163 molecule Source RGD Symbol Acc 1310382
B09	SBR1184599	ENSRNOT00000078944.1	Cdkn1c	ENSRNOG00000059500	cyclin-dependent kinase inhibitor 1C Source RGD Symbol Acc 727892
B10	SBR1134973	ENSRNOT00000060111.4	Cfh	ENSRNOG00000030715	complement factor H Source RGD Symbol Acc 620428
B11	SBR1150315	ENSRNOT00000079040.1	Cfhr1	ENSRNOG00000042901	complement factor H-related 1 Source RGD Symbol Acc 1310510
B12	SBR1134172	ENSRNOT00000078861.1	Clu	ENSRNOG00000016460	clusterin Source RGD Symbol Acc 3907
C01	SBR1113220	ENSRNOT00000005311.6	Col1a1	ENSRNOG00000003897	collagen type I alpha 1 chain Source RGD Symbol Acc 61817
C02	SBR1147286	ENSRNOT00000022128.5	Cx3cl1	ENSRNOG00000016326	C-X3-C motif chemokine ligand 1 Source RGD Symbol Acc 620458
C03	SBR1184750	ENSRNOT00000032926.4	Cxcl16	ENSRNOG00000026647	C-X-C motif chemokine ligand 16 Source RGD Symbol Acc 1562928
C04	SBR1103825	ENSRNOT00000001415.6	Elavl1	ENSRNOG00000001069	ELAV like RNA binding protein 1 Source RGD Symbol Acc 1308649
C05	SBR1155760	ENSRNOT00000071863.3	Eml1	ENSRNOG00000043143	EMAP like 1 Source RGD Symbol Acc 1306374
C06	SBR1104886	ENSRNOT00000000206.7	AABR07058539.1	ENSRNOG00000000190	
C07	SBR1205912	ENSRNOT00000039777.1	Fbxl16	ENSRNOG00000022248	F-box and leucine-rich repeat protein 16 Source RGD Symbol Acc 1309127
C08	SBR1213470	ENSRNOT00000029179.3	Fcer1g	ENSRNOG00000024159	Fc fragment of IgE receptor Ig Source RGD Symbol Acc 2599
C09	SBR1205296	ENSRNOT00000057122.4	Fcgbp	ENSRNOG00000019129	Fc fragment of IgG binding protein Source RGD Symbol Acc 2313189
C10	SBR1161283	ENSRNOT00000082450.1	Fcgr1a	ENSRNOG00000021199	Fc fragment of IgG receptor Ia Source RGD Symbol Acc 1309912
		ENSRNOT00000		ENSRNOG00	low affinity immunoglobulin gamma Fc region receptor III-like Source RGD

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1139568	071728.2	Fcgr2a	000046663	Symbol Acc 6490558
C12	SBR1114116	ENSRNOT00000035400.7	Fcgr2b	ENSRNOG00000046452	Fc fragment of IgG receptor IIb Source RGD Symbol Acc 631331
D01	SBR1171213	ENSRNOT00000018244.5	Foxo1	ENSRNOG00000013397	forkhead box O1 Source RGD Symbol Acc 620283
D02	SBR1140011	ENSRNOT00000034401.5	Gfap	ENSRNOG00000002919	glial fibrillary acidic protein Source RGD Symbol Acc 2679
D03	SBR1218531	ENSRNOT00000050108.3	Hsf1	ENSRNOG00000021732	heat shock transcription factor 1 Source RGD Symbol Acc 620913
D04	SBR1097792	ENSRNOT00000082751.1	Jakmip3	ENSRNOG00000027590	janus kinase and microtubule interacting protein 3 Source RGD Symbol Acc 1307177
D05	SBR1110172	ENSRNOT00000082174.1	Lmna	ENSRNOG00000019638	lamin A/C Source RGD Symbol Acc 620456
D06	SBR1117792	ENSRNOT00000019351.5	Lmnb1	ENSRNOG00000013774	lamin B1 Source RGD Symbol Acc 620522
D07	SBR1101354	ENSRNOT00000022336.8	Lmnb2	ENSRNOG00000025742	lamin B2 Source RGD Symbol Acc 1563803
D08	SBR1153127	ENSRNOT00000019262.7	Elp3	ENSRNOG00000014291	elongator acetyltransferase complex subunit 3 Source RGD Symbol Acc 2324506
D09	SBR1136364	ENSRNOT00000065625.1	Lsm5	ENSRNOG00000042126	LSM5 homolog, U6 small nuclear RNA and mRNA degradation associated Source RGD Symbol Acc 1308655
D10	SBR1188478	ENSRNOT00000047752.2	Ltf	ENSRNOG00000031779	lactotransferrin Source RGD Symbol Acc 1305445
D11	SBR1148694	ENSRNOT00000021901.5	Lyzl1	ENSRNOG00000016295	lysozyme-like 1 Source RGD Symbol Acc 1559869
D12	SBR1125237	ENSRNOT00000022303.7	Mbp	ENSRNOG00000016516	myelin basic protein Source RGD Symbol Acc 3054
E01	SBR1144787	ENSRNOT00000020020.5	Mrpl43	ENSRNOG00000014890	mitochondrial ribosomal protein L43 Source RGD Symbol Acc 1307593
E02	SBR1110483	ENSRNOT00000011183.4	Ndufb11	ENSRNOG00000008329	NADH ubiquinone oxidoreductase subunit B11 Source RGD Symbol Acc 1563698
E03	SBR1207970	ENSRNOT00000013577.5	Panx1	ENSRNOG00000010060	Pannexin 1 Source RGD Symbol Acc 735204
E04	SBR1105255	ENSRNOT00000019735.5	Pdcd6	ENSRNOG00000014485	programmed cell death 6 Source RGD Symbol Acc 1311239
E05	SBR1187252	ENSRNOT00000015638.5	Phf3	ENSRNOG00000011756	PHD finger protein 3 Source RGD Symbol Acc 1304925
E06	SBR1106442	ENSRNOT00000039232.5	Polrmt	ENSRNOG00000024879	RNA polymerase mitochondrial Source RGD Symbol Acc 1304599
E07	SBR1201420	ENSRNOT00000060459.3	Pot1	ENSRNOG00000019986	protection of telomeres 1 Source RGD Symbol Acc 1562696
E08	SBR1188580	ENSRNOT00000047836.4	Rap1a	ENSRNOG00000032463	RAP1A, member of RAS oncogene family Source RGD Symbol Acc 1359694
E09	SBR1108224	ENSRNOT00000058805.5	Wrn	ENSRNOG00000015440	Werner syndrome RecQ like helicase Source RGD Symbol Acc 1564788
E10	SBR1118159	ENSRNOT00000082733.1	Rnf144b	ENSRNOG00000016123	ring finger protein 144B Source RGD Symbol Acc 1308856
E11	SBR1128955	ENSRNOT00000015473.3	S100a8	ENSRNOG00000011557	S100 calcium binding protein A8 Source RGD Symbol Acc 620265
E12	SBR1172000	ENSRNOT00000015351.5	S100a9	ENSRNOG00000011483	S100 calcium binding protein A9 Source RGD Symbol Acc 620267
F01	SBR1194302	ENSRNOT00000021819.3	Scn2b	ENSRNOG00000016221	sodium voltage-gated channel beta subunit 2 Source RGD Symbol Acc 3633
F02	SBR1173975	ENSRNOT00000018861.6	Sirt3	ENSRNOG00000013828	sirtuin 3 Source RGD Symbol Acc 1308374
F03	SBR1200206	ENSRNOT00000008758.5	Sirt6	ENSRNOG00000006393	sirtuin 6 Source RGD Symbol Acc 1305216
F04	SBR1164397	ENSRNOT00000046847.4	Smad2	ENSRNOG00000018140	SMAD family member 2 Source RGD Symbol Acc 3031
F05	SBR1189146	ENSRNOT00000074392.2	AABR07053516.1	ENSRNOG00000050552	
F06	SBR1178041	ENSRNOT00000049741.2	Terf1	ENSRNOG00000007291	telomeric repeat binding factor 1 Source RGD Symbol Acc 1311574
F07	SBR1115491	ENSRNOT00000027695.6	Terf2	ENSRNOG00000020435	telomeric repeat binding factor 2 Source RGD Symbol Acc 1310881
F08	SBR1194838	ENSRNOT00000000753.4	Tfam	ENSRNOG00000000613	transcription factor A, mitochondrial Source RGD Symbol Acc 620682
F09	SBR1112136	ENSRNOT00000078768.1	Tfb1m	ENSRNOG00000056223	transcription factor B1, mitochondrial Source RGD Symbol Acc 727795
F10	SBR1205454	ENSRNOT00000003618.3	Tfb2m	ENSRNOG00000002695	transcription factor B2, mitochondrial Source RGD Symbol Acc 1307091

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1125369	ENSRNOT00000027362.5	Tinf2	ENSRNOG00000020189	TERF1 interacting nuclear factor 2 Source RGD Symbol Acc 1359192
F12	SBR1126190	ENSRNOT00000013025.4	Tlr2	ENSRNOG00000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
G01	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG00000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G02	SBR1176107	ENSRNOT00000022578.5	Tmem135	ENSRNOG00000016815	transmembrane protein 135 Source RGD Symbol Acc 1309948
G03	SBR1195756	ENSRNOT00000003128.4	Tmem33	ENSRNOG00000002254	transmembrane protein 33 Source RGD Symbol Acc 708371
G04	SBR1187324	ENSRNOT00000046344.3	Tollip	ENSRNOG00000019861	toll interacting protein Source RGD Symbol Acc 1304676
G05	SBR1102635	ENSRNOT00000026280.4	Tpp1	ENSRNOG00000019212	tripeptidyl peptidase 1 Source RGD Symbol Acc 621296
G06	SBR1211460	ENSRNOT00000028793.6	Txnip	ENSRNOG00000021201	thioredoxin interacting protein Source RGD Symbol Acc 620886
G07	SBR1175877	ENSRNOT00000057522.4	Vps13c	ENSRNOG00000030213	vacuolar protein sorting 13 homolog C Source RGD Symbol Acc 1560364
G08	SBR1139205	ENSRNOT00000015986.7	LOC108348048	ENSRNOG00000000195	von Willebrand factor A domain-containing protein 5A Source RGD Symbol Acc 11476240
G09	SBR1150768	ENSRNOT00000081553.1	Zbtb10	ENSRNOG00000061862	zinc finger and BTB domain containing 10 Source RGD Symbol Acc 708377
G10	SBR1128104	ENSRNOT00000079053.1	Zfp9	ENSRNOG00000006726	zinc finger protein 9 Source NCBI gene Acc 100158232
G11	SBR1191867	ENSRNOT00000080241.1	Zfr	ENSRNOG00000011627	zinc finger RNA binding protein Source RGD Symbol Acc 1311890
G12	SBR1185086	ENSRNOT00000016410.5	Zmpste24	ENSRNOG00000012054	zinc metallopeptidase STE24 Source RGD Symbol Acc 1305570
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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