

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

Rat T-Cell & B-Cell Activation

Cat. no. 249950 SBRN-053ZA

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	Ada	Apc	Bad	Bcl2	Casp3	Cblb	Cd3	Cd4	Ccnd3	Ccr3	Ccr4	Cd1d1
B	Cd2	Cd276	Cd28	Cd38	Cd3d	Cd3e	Cd3g	Cd4	Cd40	Cd40lg	Cd47	Cd48
C	Cd74	Cd79a1	Cd81	Cd8a	Cd8b	Cdkn1a	Cr2	Csf2	Ctla4	Cxcl12	Cxcr4	Cxcr5
D	Dpp4	Egr1	Flt3	Foxp3	Hsp90aa1	Icam1	Ifng	Il10	Il11	Il12b	Il15	Il18
E	Il18r1	Il1b	Il2	Il27	Il2ra	Il4	Il6	Il7	Inha	Irf4	Jag2	Lck
F	LOC100910771	Mef4a1	Nck1	Nos2	AABR07031756.1	Pax1	Pdcd1lg2	Pik3r1	Prkcd	Prkca	Ptrr	Ptpnc
G	Rag1	Socs1	Spp1	Tgfb1	Tlr1	Tlr4	Tlr6	Tnfrsf14	Tp53	Traf6	Vav1	Was
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	SBR1176988	ENSRNOT00000014151.6	Ada	ENSRNOG0000010265	adenosine deaminase Source RGD Symbol Acc 2031
A02	SBR1094067	ENSRNOT00000090264.1	Apc	ENSRNOG0000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A03	SBR1106737	ENSRNOT00000028712.5	Bad	ENSRNOG0000021147	BCL2-associated agonist of cell death Source RGD Symbol Acc 620103
A04	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A05	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
A06	SBR1160373	ENSRNOT00000077220.1	Cblb	ENSRNOG000001982	Cbl proto-oncogene B Source RGD Symbol Acc 620535
A07	SBR1146662	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A08	SBR1202700	ENSRNOT00000015199.3	Ccl4	ENSRNOG0000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
A09	SBR1162864	ENSRNOT00000074217.1	Ccnd3	ENSRNOG0000050258	cyclin D3 Source RGD Symbol Acc 2293
A10	SBR1110610	ENSRNOT00000008809.4	Ccr3	ENSRNOG0000006736	C-C motif chemokine receptor 3 Source RGD Symbol Acc 620593
A11	SBR1113127	ENSRNOT00000013705.3	Ccr4	ENSRNOG0000010315	C-C motif chemokine receptor 4 Source RGD Symbol Acc 620594
A12	SBR1105922	ENSRNOT00000022150.2	Cd1d1	ENSRNOG0000016451	CD1d1 molecule Source RGD Symbol Acc 2296
B01	SBR1114446	ENSRNOT00000021268.7	Cd2	ENSRNOG0000015821	Cd2 molecule Source RGD Symbol Acc 2297
B02	SBR1121487	ENSRNOT00000042681.4	Cd276	ENSRNOG0000033608	Cd276 molecule Source RGD Symbol Acc 727815
B03	SBR1154388	ENSRNOT00000013701.3	Cd28	ENSRNOG0000010283	Cd28 molecule Source RGD Symbol Acc 2299
B04	SBR1175509	ENSRNOT00000004121.4	Cd38	ENSRNOG0000003069	CD38 molecule Source RGD Symbol Acc 2303
B05	SBR1162364	ENSRNOT00000021488.5	Cd3d	ENSRNOG0000015994	CD3d molecule Source RGD Symbol Acc 2304
B06	SBR1196726	ENSRNOT00000091190.1	Cd3e	ENSRNOG0000016069	CD3e molecule Source RGD Symbol Acc 1309222
B07	SBR1193714	ENSRNOT00000021390.6	Cd3g	ENSRNOG0000015945	CD3g molecule Source RGD Symbol Acc 1307718
B08	SBR1197766	ENSRNOT00000021915.2	Cd4	ENSRNOG0000016294	Cd4 molecule Source RGD Symbol Acc 2306
B09	SBR1146998	ENSRNOT00000055148.4	Cd40	ENSRNOG0000018488	CD40 molecule Source RGD Symbol Acc 619830
B10	SBR1110042	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
B11	SBR1113800	ENSRNOT00000050142.5	Cd47	ENSRNOG0000001964	Cd47 molecule Source RGD Symbol Acc 2308
B12	SBR1098057	ENSRNOT00000006306.7	Cd48	ENSRNOG0000004737	Cd48 molecule Source RGD Symbol Acc 620620
C01	SBR1204485	ENSRNOT00000025344.5	Cd74	ENSRNOG0000018735	CD74 molecule Source RGD Symbol Acc 2313
C02	SBR1102854	ENSRNOT00000071609.1	Cd79al	ENSRNOG0000049925	Cd79a molecule-like Source RGD Symbol Acc 1598036
C03	SBR1153510	ENSRNOT00000027760.7	Cd81	ENSRNOG0000020451	Cd81 molecule Source RGD Symbol Acc 2315
C04	SBR1107267	ENSRNOT00000009515.4	Cd8a	ENSRNOG0000007178	CD8a molecule Source RGD Symbol Acc 2316
C05	SBR1112088	ENSRNOT00000009392.7	Cd8b	ENSRNOG0000007129	CD8b molecule Source RGD Symbol Acc 2317
C06	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
C07	SBR1193166	ENSRNOT00000080616.1	Cr2	ENSRNOG0000034164	complement C3d receptor 2 Source RGD Symbol Acc 1310065
C08	SBR1136894	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
C09	SBR1126546	ENSRNOT00000088183.1	Ctla4	ENSRNOG0000054129	cytotoxic T-lymphocyte-associated protein 4 Source RGD Symbol Acc 61975
C10	SBR1209894	ENSRNOT00000066670.3	Cxcl12	ENSRNOG0000013589	C-X-C motif chemokine ligand 12 Source RGD Symbol Acc 3651
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1129817	005143.6	Cxcr4	000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
C12	SBR1117366	ENSRNOT00000016580.3	Cxcr5	ENSRNOG0000012430	C-X-C motif chemokine receptor 5 Source RGD Symbol Acc 62010
D01	SBR1131913	ENSRNOT00000085426.1	Dpp4	ENSRNOG0000030763	dipeptidylpeptidase 4 Source RGD Symbol Acc 2515
D02	SBR1216566	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
D03	SBR1099255	ENSRNOT00000088957.1	Flt3	ENSRNOG0000054764	fms-related tyrosine kinase 3 Source RGD Symbol Acc 61308
D04	SBR1152159	ENSRNOT00000091146.1	Foxp3	ENSRNOG0000011702	forkhead box P3 Source RGD Symbol Acc 1562112
D05	SBR1113341	ENSRNOT00000086310.1	Hsp90aa1	ENSRNOG0000059714	heat shock protein 90 alpha family class A member 1 Source RGD Symbol Acc 631409
D06	SBR1152534	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
D07	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D08	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D09	SBR1192221	ENSRNOT00000023489.5	Il11	ENSRNOG0000017386	interleukin 11 Source RGD Symbol Acc 621475
D10	SBR1133771	ENSRNOT00000005898.6	Il12b	ENSRNOG0000004380	interleukin 12B Source RGD Symbol Acc 628704
D11	SBR1188273	ENSRNOT00000004590.6	Il15	ENSRNOG0000003439	interleukin 15 Source RGD Symbol Acc 2887
D12	SBR1183288	ENSRNOT00000013093.6	Il18	ENSRNOG0000009848	interleukin 18 Source RGD Symbol Acc 2889
E01	SBR1139098	ENSRNOT00000020194.7	Il18r1	ENSRNOG0000015027	interleukin 18 receptor 1 Source RGD Symbol Acc 1308589
E02	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
E03	SBR1102170	ENSRNOT00000023327.2	Il2	ENSRNOG0000017348	interleukin 2 Source RGD Symbol Acc 620047
E04	SBR1210167	ENSRNOT00000025950.5	Il27	ENSRNOG0000019170	interleukin 27 Source RGD Symbol Acc 1561420
E05	SBR1164904	ENSRNOT00000073144.2	Il2ra	ENSRNOG0000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
E06	SBR1101847	ENSRNOT00000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
E07	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E08	SBR1129975	ENSRNOT00000016091.7	Il7	ENSRNOG0000011973	interleukin 7 Source RGD Symbol Acc 2904
E09	SBR1141256	ENSRNOT00000027227.4	Inha	ENSRNOG0000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
E10	SBR1179446	ENSRNOT00000088931.1	Irf4	ENSRNOG0000061070	interferon regulatory factor 4 Source RGD Symbol Acc 1308050
E11	SBR1202127	ENSRNOT00000019213.6	Jag2	ENSRNOG0000013927	jagged 2 Source RGD Symbol Acc 2938
E12	SBR1191381	ENSRNOT00000012936.6	Lck	ENSRNOG0000009705	LCK proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 2994
F01	SBR1093683	ENSRNOT00000007654.5	LOC100910771	ENSRNOG0000005724	mitogen-activated protein kinase kinase kinase 7-like Source RGD Symbol Acc 6496502
F02	SBR1213943	ENSRNOT00000028433.7	Ms4a1	ENSRNOG0000020945	membrane spanning 4-domains A1 Source RGD Symbol Acc 1311999
F03	SBR1146512	ENSRNOT00000020330.7	Nck1	ENSRNOG0000014917	NCK adaptor protein 1 Source RGD Symbol Acc 1310688
F04	SBR1197401	ENSRNOT00000073138.2	Nos2	ENSRNOG0000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
F05	SBR1127733	ENSRNOT00000044287.4	AABR07031756.1	ENSRNOG0000014096	nuclear receptor subfamily 3, group C, member 1 Source NCBI gene Acc 24413
F06	SBR1125228	ENSRNOT00000067983.1	Pax1	ENSRNOG0000024882	paired box 1 Source RGD Symbol Acc 1588548
F07	SBR1191561	ENSRNOT00000021614.6	Pdcd1lg2	ENSRNOG0000016136	programmed cell death 1 ligand 2 Source RGD Symbol Acc 1306403
F08	SBR1155861	ENSRNOT00000025687.7	Pik3r1	ENSRNOG0000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
F09	SBR1205058	ENSRNOT00000025858.7	Prkcd	ENSRNOG0000016346	protein kinase C, delta Source RGD Symbol Acc 67383
F10	SBR1175970	ENSRNOT00000025901.6	Prkcq	ENSRNOG0000019057	protein kinase C, theta Source RGD Symbol Acc 620968

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1155849	ENSRNOT00000084624.1	Prlr	ENSRNOG0000057557	prolactin receptor Source RGD Symbol Acc 3407
F12	SBR1159554	ENSRNOT00000064785.3	Ptprc	ENSRNOG0000000655	protein tyrosine phosphatase, receptor type, C Source RGD Symbol Acc 3451
G01	SBR1126866	ENSRNOT00000006115.5	Rag1	ENSRNOG0000004630	recombination activating 1 Source RGD Symbol Acc 619790
G02	SBR1119822	ENSRNOT00000003458.3	Socs1	ENSRNOG0000002568	suppressor of cytokine signaling 1 Source RGD Symbol Acc 69272
G03	SBR1210860	ENSRNOT00000075989.1	Spp1	ENSRNOG0000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
G04	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G05	SBR1137224	ENSRNOT00000059124.3	Tlr1	ENSRNOG0000038722	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
G06	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G07	SBR1133670	ENSRNOT00000002933.5	Tlr6	ENSRNOG0000002161	toll-like receptor 6 Source RGD Symbol Acc 1303030
G08	SBR1099702	ENSRNOT00000074247.1	Tnfrsf14	ENSRNOG0000047730	TNF superfamily member 14 Source RGD Symbol Acc 1588572
G09	SBR1172374	ENSRNOT00000046490.3	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G10	SBR1200335	ENSRNOT00000006148.5	Traf6	ENSRNOG0000004639	TNF receptor associated factor 6 Source RGD Symbol Acc 1306853
G11	SBR1203435	ENSRNOT00000073294.2	Vav1	ENSRNOG0000050430	vav guanine nucleotide exchange factor 1 Source RGD Symbol Acc 3951
G12	SBR1126078	ENSRNOT00000073289.3	Was	ENSRNOG0000031058	Wiskott-Aldrich syndrome Source RGD Symbol Acc 1563567
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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