

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

Rat NFkB Signaling Pathway

Cat. no. 249950 SBRN-025ZA

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	Agf	Akt1	Aif1	Aif2	Bcl10	Bcl2a1	Bcl2l1	Bcl3	Birc3	Card10	AABR0703547 0.1	Casp1
B	Casp8	Ccl2	Ccl5	Cd40	Cflar	Chuk	Crebbp	Csf1	Csf2	Csf3	Egfr	Egr1
C	Elf2ak2	F2r	Fadd	Faslg	Fos	Hmx1	Icam1	Ifna5	Ifng	Ikbkb	Ikbke	Ikbkg
D	Il10	Il1a	Il1b	Il1r1	Irak1	Irak2	Irak4	Irf1	Jun	Traf1	Uta	Ltbr
E	Map2k3	Map3k1	Mapk3	Myd88	Nfkb1	Nfkb2	Nfkbia	AABR0706618 0.1	Psip1	Raf1	Rel	Rela
F	Ripk1	Ripk2	Smad4	Stat1	Tbk1	Timp1	Tlr1	Tlr2	Tlr3	Tlr4	Tlr6	Tlr9
G	LOC1036943 80	AABR0701832 3.1	Tnfrsf1a	Tnfrsf1b	Tnfrsf10	Tnfrsf14	Tollip	Tradd	Traf2	Traf3	Traf6	Zap70
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	SBR1195605	ENSRNOT00000024917.4	Agt	ENSRNOG0000018445	angiotensinogen Source RGD Symbol Acc 2069
A02	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	SBR1105972	ENSRNOT00000087298.1	Atf1	ENSRNOG0000061088	activating transcription factor 1 Source RGD Symbol Acc 1307360
A04	SBR1207469	ENSRNOT00000002174.7	Atf2	ENSRNOG0000001597	activating transcription factor 2 Source RGD Symbol Acc 621862
A05	SBR1160388	ENSRNOT00000019911.6	Bcl10	ENSRNOG0000042389	BCL10, immune signaling adaptor Source RGD Symbol Acc 620544
A06	SBR1100092	ENSRNOT00000039850.3	Bcl2a1	ENSRNOG0000047606	BCL2-related protein A1 Source RGD Symbol Acc 620621
A07	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A08	SBR1162415	ENSRNOT00000025913.6	Bcl3	ENSRNOG0000043416	BCL3, transcription coactivator Source RGD Symbol Acc 1589465
A09	SBR1181460	ENSRNOT00000090774.1	Birc3	ENSRNOG0000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
A10	SBR1116408	ENSRNOT00000077677.1	Card10	ENSRNOG0000008401	caspase recruitment domain family, member 10 Source RGD Symbol Acc 1304949
A11	SBR1166696	ENSRNOT00000092970.1	AABR07035470.1	ENSRNOG0000024277	caspase recruitment domain family, member 11 Source NCBI gene Acc 100363332
A12	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
B01	SBR1182801	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
B02	SBR1165601	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B03	SBR1094349	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B04	SBR1146998	ENSRNOT00000055148.4	Cd40	ENSRNOG0000018488	CD40 molecule Source RGD Symbol Acc 619830
B05	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
B06	SBR1132111	ENSRNOT00000030782.4	Chuk	ENSRNOG0000022485	conserved helix-loop-helix ubiquitous kinase Source RGD Symbol Acc 1306661
B07	SBR1115515	ENSRNOT00000007079.5	Crebbp	ENSRNOG0000005330	CREB binding protein Source RGD Symbol Acc 2401
B08	SBR1099651	ENSRNOT00000025222.6	Csf1	ENSRNOG0000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B09	SBR1136894	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B10	SBR1124341	ENSRNOT00000011509.3	Csf3	ENSRNOG0000008525	colony stimulating factor 3 Source RGD Symbol Acc 2426
B11	SBR1196436	ENSRNOT00000006087.2	Egfr	ENSRNOG0000004332	epidermal growth factor receptor Source RGD Symbol Acc 2543
B12	SBR1216566	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
C01	SBR1161371	ENSRNOT00000089185.1	Eif2ak2	ENSRNOG0000048315	eukaryotic translation initiation factor 2-alpha kinase 2 Source RGD Symbol Acc 3402
C02	SBR1151774	ENSRNOT00000074626.2	F2r	ENSRNOG0000048043	coagulation factor II (thrombin) receptor Source RGD Symbol Acc 2586
C03	SBR1202965	ENSRNOT00000075089.3	Fadd	ENSRNOG0000047035	Fas associated via death domain Source RGD Symbol Acc 628700
C04	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
C05	SBR1110295	ENSRNOT00000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
C06	SBR1146734	ENSRNOT00000019192.6	Hmox1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
C07	SBR1152534	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
C08	SBR1208793	ENSRNOT00000049705.1	Ifna5	ENSRNOG0000031046	interferon, alpha 5 Source RGD Symbol Acc 1359312
C09	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
C10	SBR1133299	ENSRNOT00000025851.4	Ikbkb	ENSRNOG0000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
		ENSRNOT000000		ENSRNOG00	inhibitor of nuclear factor kappa B kinase subunit epsilon Source RGD Symbol

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1116499	038151.3	Ikake	000025100	Acc 1308352
C12	SBR1133952	ENSRNOT00000078438.1	Ikake	ENSRNOG0000060936	inhibitor of nuclear factor kappa B kinase subunit gamma Source RGD Symbol Acc 735223
D01	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D02	SBR1106125	ENSRNOT00000006113.8	Il1a	ENSRNOG0000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
D03	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D04	SBR1113457	ENSRNOT00000019673.4	Il1r1	ENSRNOG0000014504	interleukin 1 receptor type 1 Source RGD Symbol Acc 2892
D05	SBR1200697	ENSRNOT00000092207.1	Irak1	ENSRNOG0000060869	interleukin-1 receptor-associated kinase 1 Source RGD Symbol Acc 1563841
D06	SBR1106113	ENSRNOT00000029819.4	Irak2	ENSRNOG0000021817	interleukin-1 receptor-associated kinase 2 Source RGD Symbol Acc 1309584
D07	SBR1111832	ENSRNOT00000007932.5	Irak4	ENSRNOG000005965	interleukin-1 receptor-associated kinase 4 Source RGD Symbol Acc 1305303
D08	SBR1170657	ENSRNOT00000010968.6	Irf1	ENSRNOG0000008144	interferon regulatory factor 1 Source RGD Symbol Acc 2920
D09	SBR1133226	ENSRNOT00000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D10	SBR1132997	ENSRNOT00000072400.2	Traf1	ENSRNOG0000048914	TNF receptor-associated factor 1 Source RGD Symbol Acc 1596290
D11	SBR1181153	ENSRNOT00000088936.1	Lta	ENSRNOG0000000838	lymphotoxin alpha Source RGD Symbol Acc 3020
D12	SBR1144410	ENSRNOT00000026184.4	Ltr	ENSRNOG0000019264	lymphotoxin beta receptor Source RGD Symbol Acc 1309448
E01	SBR1124771	ENSRNOT00000073792.2	Map2k3	ENSRNOG0000049132	mitogen activated protein kinase kinase 3 Source RGD Symbol Acc 1306620
E02	SBR1134748	ENSRNOT00000017968.3	Map3k1	ENSRNOG0000013177	mitogen-activated protein kinase kinase kinase 1 Source RGD Symbol Acc 620966
E03	SBR1209281	ENSRNOT00000087625.1	Mapk3	ENSRNOG0000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
E04	SBR1185632	ENSRNOT00000018341.5	Myd88	ENSRNOG0000013634	MYD88, innate immune signal transduction adaptor Source RGD Symbol Acc 735043
E05	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E06	SBR1164776	ENSRNOT00000026235.3	Nfkb2	ENSRNOG0000019311	nuclear factor kappa B subunit 2 Source RGD Symbol Acc 1307189
E07	SBR1120974	ENSRNOT00000009894.6	Nfkbia	ENSRNOG0000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E08	SBR1142420	ENSRNOT00000061882.4	AABR07066180.1	ENSRNOG0000011871	
E09	SBR1123789	ENSRNOT00000016130.3	Psip1	ENSRNOG0000011498	PC4 and SFRS1 interacting protein 1 Source RGD Symbol Acc 631439
E10	SBR1111289	ENSRNOT00000013831.6	Raf1	ENSRNOG0000010153	Raf-1 proto-oncogene, serine/threonine kinase Source RGD Symbol Acc 3531
E11	SBR1170346	ENSRNOT00000081077.1	Rel	ENSRNOG0000054437	REL proto-oncogene, NF-kB subunit Source RGD Symbol Acc 1311231
E12	SBR1138204	ENSRNOT00000045233.3	Rela	ENSRNOG0000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
F01	SBR1174883	ENSRNOT00000023962.5	Ripk1	ENSRNOG0000017787	receptor interacting serine/threonine kinase 1 Source RGD Symbol Acc 1310158
F02	SBR1122908	ENSRNOT00000012963.5	Ripk2	ENSRNOG0000009389	receptor-interacting serine-threonine kinase 2 Source RGD Symbol Acc 1309167
F03	SBR1183988	ENSRNOT00000090198.1	Smad4	ENSRNOG0000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F04	SBR1199428	ENSRNOT00000080522.1	Stat1	ENSRNOG0000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
F05	SBR1106734	ENSRNOT00000009260.5	Tbk1	ENSRNOG0000055528	TANK-binding kinase 1 Source RGD Symbol Acc 1588588
F06	SBR1154276	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
F07	SBR1137224	ENSRNOT00000059124.3	Tlr1	ENSRNOG0000038722	toll-like receptor 1 Source MGI Symbol Acc MGI 1341295
F08	SBR1126190	ENSRNOT00000013025.4	Tlr2	ENSRNOG0000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
F09	SBR1119614	ENSRNOT00000035781.5	Tlr3	ENSRNOG0000021726	toll-like receptor 3 Source RGD Symbol Acc 735171
F10	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1133670	ENSRNOT00000002933.5	Tlr6	ENSRNOG0000002161	toll-like receptor 6 Source RGD Symbol Acc 1303030
F12	SBR1143539	ENSRNOT00000074194.1	Tlr9	ENSRNOG0000048161	toll-like receptor 9 Source RGD Symbol Acc 631352
G01	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G02	SBR1211981	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG0000038483	
G03	SBR1130829	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG0000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G04	SBR1111098	ENSRNOT00000022478.4	Tnfrsf1b	ENSRNOG0000016575	TNF receptor superfamily member 1B Source RGD Symbol Acc 621238
G05	SBR1107258	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G06	SBR1099702	ENSRNOT00000074247.1	Tnfsf14	ENSRNOG0000047730	TNF superfamily member 14 Source RGD Symbol Acc 1588572
G07	SBR1187324	ENSRNOT00000046344.3	Tollip	ENSRNOG0000019861	toll interacting protein Source RGD Symbol Acc 1304676
G08	SBR1105478	ENSRNOT00000020405.6	Tradd	ENSRNOG0000015179	TNFRSF1A-associated via death domain Source RGD Symbol Acc 621313
G09	SBR1181541	ENSRNOT00000008253.6	Traf2	ENSRNOG0000006238	Tnf receptor-associated factor 2 Source RGD Symbol Acc 1310457
G10	SBR1135297	ENSRNOT00000010906.6	Traf3	ENSRNOG0000008145	Tnf receptor-associated factor 3 Source RGD Symbol Acc 1304633
G11	SBR1200335	ENSRNOT00000006148.5	Traf6	ENSRNOG0000004639	TNF receptor associated factor 6 Source RGD Symbol Acc 1306853
G12	SBR1112964	ENSRNOT00000023036.7	Zap70	ENSRNOG0000016995	zeta chain of T cell receptor associated protein kinase 70 Source RGD Symbol Acc 3983
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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l 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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