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

Rat Apoptosis

Cat. no. 249950 SBRN-012ZR

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	LOC100909750	Aifm1	Akt1	Anxa5	Apaf1	Api5	Aven	Bad	Bag1	Bak1	Bax	Bcl10
B	Bcl2	Bcl2a1	Bcl2l1	Bcl2l11	Bcl2l2	Bid	Bik	Birc2	Birc3	Birc5	Bnip2	Bnip3
C	Bok	Card10	Casp1	Casp12	Casp14	Casp2	Casp3	Casp4	LOC103689977	Casp7	Casp8	Casp8ap2
D	Casp9	Cd40	Cd40lg	Cflar	Cidea	Cideb	Cycs	Dad1	Dapk1	Dffa	Dffb	Diablo
E	Fadd	Faim	Fas	Faslg	Gadd45a	Nod1	Il10	Lta	Ltbr	Mapk1	Mapk8ip1	Bfar
F	AC135826.1	Nfkb1	Nol3	Polb	Prdx2	Prlr	Pycard	Ripk2	Sphk2	LOC103694380	AABR07018323.1	Tnfrsf11b
G	Tnfrsf1a	Tnfrsf1b	Tnfsf10	Tnfsf12	Tp53	Tp53bp2	Tp63	Tp73	Tradd	Traf2	Traf3	Xiap
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	SBR1140753	ENSRNOT00000042495.5	LOC100909750	ENSRNOG00000047356	tyrosine-protein kinase ABL1-like Source RGD Symbol Acc 6502032
A02	SBR1190041	ENSRNOT00000008503.5	Aifm1	ENSRNOG00000006067	apoptosis inducing factor, mitochondria associated 1 Source RGD Symbol Acc 620817
A03	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG00000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A04	SBR1096992	ENSRNOT00000019554.6	Anxa5	ENSRNOG00000014453	annexin A5 Source RGD Symbol Acc 2120
A05	SBR1126753	ENSRNOT00000010869.6	Apaf1	ENSRNOG00000008022	apoptotic peptidase activating factor 1 Source RGD Symbol Acc 620575
A06	SBR1136265	ENSRNOT00000013914.4	Api5	ENSRNOG00000009689	apoptosis inhibitor 5 Source RGD Symbol Acc 1309772
A07	SBR1140621	ENSRNOT00000065752.1	Aven	ENSRNOG00000006419	apoptosis and caspase activation inhibitor Source RGD Symbol Acc 1309928
A08	SBR1106737	ENSRNOT00000028712.5	Bad	ENSRNOG00000021147	BCL2-associated agonist of cell death Source RGD Symbol Acc 620103
A09	SBR1157338	ENSRNOT00000011455.6	Bag1	ENSRNOG00000008277	Bcl2 associated athanogene 1 Source RGD Symbol Acc 1305203
A10	SBR1162844	ENSRNOT00000000576.5	Bak1	ENSRNOG00000000485	BCL2-antagonist/killer 1 Source RGD Symbol Acc 621635
A11	SBR1154566	ENSRNOT00000028328.5	Bax	ENSRNOG00000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A12	SBR1160388	ENSRNOT00000019911.6	Bcl10	ENSRNOG00000042389	BCL10, immune signaling adaptor Source RGD Symbol Acc 620544
B01	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG00000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
B02	SBR1100092	ENSRNOT00000039850.3	Bcl2a1	ENSRNOG00000047606	BCL2-related protein A1 Source RGD Symbol Acc 620621
B03	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG00000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
B04	SBR1103294	ENSRNOT00000022596.6	Bcl2l11	ENSRNOG00000016551	BCL2 like 11 Source RGD Symbol Acc 628774
B05	SBR1163920	ENSRNOT00000020409.4	Bcl2l2	ENSRNOG00000015732	Bcl2-like 2 Source RGD Symbol Acc 620717
B06	SBR1147619	ENSRNOT00000016776.2	Bid	ENSRNOG00000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
B07	SBR1218519	ENSRNOT00000013977.2	Bik	ENSRNOG00000010359	BCL2-interacting killer Source RGD Symbol Acc 621547
B08	SBR1099985	ENSRNOT00000014560.6	Birc2	ENSRNOG00000010602	baculoviral IAP repeat-containing 2 Source RGD Symbol Acc 620690
B09	SBR1181460	ENSRNOT00000090774.1	Birc3	ENSRNOG00000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
B10	SBR1130503	ENSRNOT00000072387.1	Birc5	ENSRNOG00000050819	baculoviral IAP repeat-containing 5 Source RGD Symbol Acc 70499
B11	SBR1194772	ENSRNOT00000081072.1	Bnip2	ENSRNOG00000056024	BCL2 interacting protein 2 Source RGD Symbol Acc 1308944
B12	SBR1178674	ENSRNOT00000023477.6	Bnip3	ENSRNOG00000017243	BCL2 interacting protein 3 Source RGD Symbol Acc 620800
C01	SBR1113372	ENSRNOT00000024695.6	Bok	ENSRNOG00000018214	BCL2 family apoptosis regulator BOK Source RGD Symbol Acc 70984
C02	SBR1116408	ENSRNOT00000077677.1	Card10	ENSRNOG00000008401	caspase recruitment domain family, member 10 Source RGD Symbol Acc 1304949
C03	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG00000007372	caspase 1 Source RGD Symbol Acc 2274
C04	SBR1156186	ENSRNOT00000088553.1	Casp12	ENSRNOG00000033434	caspase 12 Source RGD Symbol Acc 621758
C05	SBR1199508	ENSRNOT00000009643.3	Casp14	ENSRNOG00000007352	caspase 14 Source RGD Symbol Acc 1311781
C06	SBR1206768	ENSRNOT00000022543.5	Casp2	ENSRNOG00000016707	caspase 2 Source RGD Symbol Acc 69274
C07	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG00000010475	caspase 3 Source RGD Symbol Acc 2275
C08	SBR1157462	ENSRNOT00000061973.4	Casp4	ENSRNOG00000033697	caspase 4 Source RGD Symbol Acc 621757
C09	SBR1150833	ENSRNOT00000078017.1	LOC103689977	ENSRNOG00000052613	caspase 6 Source RGD Symbol Acc 70967
C10	SBR1124602	ENSRNOT00000080511.1	Casp7	ENSRNOG00000056216	caspase 7 Source RGD Symbol Acc 620944
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1182801	016613.4	Casp8	000012331	caspase 8 Source RGD Symbol Acc 620945
C12	SBR1210833	ENSRNOT00000079656.1	Casp8ap2	ENSRNOG00000006487	caspase 8 associated protein 2 Source RGD Symbol Acc 1305771
D01	SBR1175310	ENSRNOT00000085378.1	Casp9	ENSRNOG00000012944	caspase 9 Source RGD Symbol Acc 61867
D02	SBR1146998	ENSRNOT00000055148.4	Cd40	ENSRNOG00000018488	CD40 molecule Source RGD Symbol Acc 619830
D03	SBR1110042	ENSRNOT00000001162.4	Cd40lg	ENSRNOG00000000871	CD40 ligand Source RGD Symbol Acc 708418
D04	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG00000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
D05	SBR1168374	ENSRNOT00000024968.7	Cidea	ENSRNOG00000018505	cell death-inducing DFFA-like effector a Source RGD Symbol Acc 1305106
D06	SBR1209539	ENSRNOT00000027612.6	Cideb	ENSRNOG00000020377	cell death-inducing DFFA-like effector b Source RGD Symbol Acc 1310000
D07	SBR1142435	ENSRNOT00000014058.7	Cycs	ENSRNOG00000010452	cytochrome c, somatic-like Source RGD Symbol Acc 2322845
D08	SBR1216298	ENSRNOT00000012233.5	Dad1	ENSRNOG00000009090	defender against cell death 1 Source RGD Symbol Acc 621028
D09	SBR1155991	ENSRNOT00000080750.1	Dapk1	ENSRNOG00000018198	death associated protein kinase 1 Source RGD Symbol Acc 1311629
D10	SBR1134760	ENSRNOT00000059522.2	Dffa	ENSRNOG00000013603	DNA fragmentation factor subunit alpha Source RGD Symbol Acc 620334
D11	SBR1126039	ENSRNOT00000032825.5	Dffb	ENSRNOG00000025030	DNA fragmentation factor subunit beta Source RGD Symbol Acc 620335
D12	SBR1124639	ENSRNOT00000047861.4	Diablo	ENSRNOG00000029197	diablo, IAP-binding mitochondrial protein Source RGD Symbol Acc 1310885
E01	SBR1202965	ENSRNOT00000075089.3	Fadd	ENSRNOG00000047035	Fas associated via death domain Source RGD Symbol Acc 628700
E02	SBR1190674	ENSRNOT00000045821.3	Faim	ENSRNOG00000030463	Fas apoptotic inhibitory molecule Source RGD Symbol Acc 620572
E03	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG00000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
E04	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG00000002978	Fas ligand Source RGD Symbol Acc 3880
E05	SBR1179414	ENSRNOT00000007698.6	Gadd45a	ENSRNOG00000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
E06	SBR1100856	ENSRNOT00000014324.6	Nod1	ENSRNOG00000010629	nucleotide-binding oligomerization domain containing 1 Source RGD Symbol Acc 1562269
E07	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG00000004647	interleukin 10 Source RGD Symbol Acc 2886
E08	SBR1181153	ENSRNOT00000088936.1	Lta	ENSRNOG00000000838	lymphotoxin alpha Source RGD Symbol Acc 3020
E09	SBR1144410	ENSRNOT00000026184.4	Ltbr	ENSRNOG00000019264	lymphotoxin beta receptor Source RGD Symbol Acc 1309448
E10	SBR1202944	ENSRNOT00000002533.7	Mapk1	ENSRNOG00000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
E11	SBR1117844	ENSRNOT00000079746.1	Mapk8ip1	ENSRNOG00000058478	mitogen-activated protein kinase 8 interacting protein 1 Source RGD Symbol Acc 70937
E12	SBR1141957	ENSRNOT00000004217.8	Bfar	ENSRNOG00000003151	bifunctional apoptosis regulator Source RGD Symbol Acc 1304791
F01	SBR1205876	ENSRNOT00000072926.3	AC135826.1	ENSRNOG00000033693	NLR family, apoptosis inhibitory protein 2 Source MGI Symbol Acc MGI 1298226
F02	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG00000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
F03	SBR1157171	ENSRNOT00000020908.5	Nol3	ENSRNOG00000015588	nucleolar protein 3 Source RGD Symbol Acc 708558
F04	SBR1214858	ENSRNOT00000026039.5	Polb	ENSRNOG00000019150	DNA polymerase beta Source RGD Symbol Acc 3363
F05	SBR1150356	ENSRNOT00000004799.5	Prdx2	ENSRNOG00000003520	peroxiredoxin 2 Source RGD Symbol Acc 3838
F06	SBR1155849	ENSRNOT00000084624.1	Prlr	ENSRNOG00000057557	prolactin receptor Source RGD Symbol Acc 3407
F07	SBR1158649	ENSRNOT00000026699.4	Pycard	ENSRNOG00000019675	PYD and CARD domain containing Source RGD Symbol Acc 628637
F08	SBR1122908	ENSRNOT00000012963.5	Ripk2	ENSRNOG00000009389	receptor-interacting serine-threonine kinase 2 Source RGD Symbol Acc 1309167
F09	SBR1172581	ENSRNOT00000028549.5	Sphk2	ENSRNOG00000021032	sphingosine kinase 2 Source RGD Symbol Acc 1307757
F10	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1211981	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG00000038483	
F12	SBR1183920	ENSRNOT00000011344.5	Tnfrsf11b	ENSRNOG00000008336	TNF receptor superfamily member 11B Source RGD Symbol Acc 619802
G01	SBR1130829	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG00000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G02	SBR1111098	ENSRNOT00000022478.4	Tnfrsf1b	ENSRNOG00000016575	TNF receptor superfamily member 1B Source RGD Symbol Acc 621238
G03	SBR1107258	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG00000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G04	SBR1162961	ENSRNOT00000064401.2	Tnfsf12	ENSRNOG00000045670	TNF superfamily member 12 Source RGD Symbol Acc 1359620
G05	SBR1172374	ENSRNOT00000046490.3	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G06	SBR1133787	ENSRNOT00000004330.7	Tp53bp2	ENSRNOG00000003237	tumor protein p53 binding protein, 2 Source RGD Symbol Acc 1305461
G07	SBR1198629	ENSRNOT00000067251.4	Tp63	ENSRNOG00000001924	tumor protein p63 Source RGD Symbol Acc 620863
G08	SBR1108065	ENSRNOT00000055398.2	Tp73	ENSRNOG00000024707	tumor protein p73 Source RGD Symbol Acc 1307083
G09	SBR1105478	ENSRNOT00000020405.6	Tradd	ENSRNOG00000015179	TNFRSF1A-associated via death domain Source RGD Symbol Acc 621313
G10	SBR1181541	ENSRNOT00000008253.6	Traf2	ENSRNOG00000006238	Tnf receptor-associated factor 2 Source RGD Symbol Acc 1310457
G11	SBR1135297	ENSRNOT00000010906.6	Traf3	ENSRNOG00000008145	Tnf receptor-associated factor 3 Source RGD Symbol Acc 1304633
G12	SBR1144925	ENSRNOT00000009336.3	Xiap	ENSRNOG00000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.