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

Rat Cell Death PathwayFinder

Cat. no. 249950 SBRN-212ZR

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	Akt1	Apaf1	App	Atg12	Atg16l1	Atg3	Atg5	Atg7	Atp6v1g2	Bax	Bcl2
B	Bcl2a1	Bcl2l1	Bcl2l11	Becn1	Birc2	Birc3	Bmf	Casp1	Casp2	Casp3	LOC103689977	Casp7
C	Casp9	Cd40	Cd40lg	Cflar	Commd4	Ctsb	Ctss	Cybb	Cyld	Defb1	Dffa	Dpysl4
D	Esr1	Fas	Faslg	Foxi1	Gaa	Gadd45a	Galnt5	Grb2	Hspbap1	Htt	Ifng	Igf1
E	Igf1r	Ins2	Irgm	Kcnip1	Mag	Map1lc3a	Mapk8	Api5	Nfkb1	Nol3	Olr1583	Parp1
F	Parp2	Pik3c3	Pten	PVR	Rab25	RGD1311517	Dennd4a	Rps6kb1	Snca	Spata2	Sqstm1	Sycp2
G	Maco1	LOC103694380	AABR07018323.1	Tnfrsf11b	Tnfrsf1a	Tnfrsf4	Tnfrsf8	Tp53	Traf2	Txnl4b	Ulk1	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	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG00000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	SBR1126753	ENSRNOT00000010869.6	Apaf1	ENSRNOG00000008022	apoptotic peptidase activating factor 1 Source RGD Symbol Acc 620575
A04	SBR1129904	ENSRNOT00000048854.6	App	ENSRNOG00000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
A05	SBR1115052	ENSRNOT00000000170.5	Atg12	ENSRNOG00000000157	autophagy related 12 Source RGD Symbol Acc 1306306
A06	SBR1198917	ENSRNOT00000080482.1	Atg16l1	ENSRNOG00000017913	autophagy related 16-like 1 Source RGD Symbol Acc 1310631
A07	SBR1199058	ENSRNOT00000002906.6	Atg3	ENSRNOG00000002094	autophagy related 3 Source RGD Symbol Acc 708464
A08	SBR1106755	ENSRNOT00000057078.4	Atg5	ENSRNOG00000000322	autophagy related 5 Source RGD Symbol Acc 1359580
A09	SBR1149690	ENSRNOT00000067532.2	Atg7	ENSRNOG00000007486	autophagy related 7 Source RGD Symbol Acc 1304817
A10	SBR1131254	ENSRNOT00000001114.5	Atp6v1g2	ENSRNOG00000000840	ATPase H+ transporting V1 subunit G2 Source RGD Symbol Acc 1303186
A11	SBR1154566	ENSRNOT00000028328.5	Bax	ENSRNOG00000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A12	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG00000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
B01	SBR1100092	ENSRNOT00000039850.3	Bcl2a1	ENSRNOG00000047606	BCL2-related protein A1 Source RGD Symbol Acc 620621
B02	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG00000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
B03	SBR1103294	ENSRNOT00000022596.6	Bcl2l11	ENSRNOG00000016551	BCL2 like 11 Source RGD Symbol Acc 628774
B04	SBR1101983	ENSRNOT00000075886.1	Becn1	ENSRNOG00000020513	beclin 1 Source RGD Symbol Acc 620190
B05	SBR1099985	ENSRNOT00000014560.6	Birc2	ENSRNOG00000010602	baculoviral IAP repeat-containing 2 Source RGD Symbol Acc 620690
B06	SBR1181460	ENSRNOT00000090774.1	Birc3	ENSRNOG00000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
B07	SBR1196608	ENSRNOT00000010381.4	Bmf	ENSRNOG00000007529	Bcl2 modifying factor Source RGD Symbol Acc 628658
B08	SBR1122190	ENSRNOT00000009993.6	Casp1	ENSRNOG00000007372	caspase 1 Source RGD Symbol Acc 2274
B09	SBR1206768	ENSRNOT00000022543.5	Casp2	ENSRNOG00000016707	caspase 2 Source RGD Symbol Acc 69274
B10	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG00000010475	caspase 3 Source RGD Symbol Acc 2275
B11	SBR1150833	ENSRNOT00000078017.1	LOC103689977	ENSRNOG00000052613	caspase 6 Source RGD Symbol Acc 70967
B12	SBR1124602	ENSRNOT00000080511.1	Casp7	ENSRNOG00000056216	caspase 7 Source RGD Symbol Acc 620944
C01	SBR1175310	ENSRNOT00000085378.1	Casp9	ENSRNOG00000012944	caspase 9 Source RGD Symbol Acc 61867
C02	SBR1146998	ENSRNOT00000055148.4	Cd40	ENSRNOG00000018488	CD40 molecule Source RGD Symbol Acc 619830
C03	SBR1110042	ENSRNOT00000001162.4	Cd40lg	ENSRNOG00000000871	CD40 ligand Source RGD Symbol Acc 708418
C04	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG00000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
C05	SBR1163867	ENSRNOT00000064903.1	Commd4	ENSRNOG00000018671	COMM domain containing 4 Source RGD Symbol Acc 1306104
C06	SBR1215406	ENSRNOT00000014177.5	Ctsb	ENSRNOG00000010331	cathepsin B Source RGD Symbol Acc 621509
C07	SBR1107619	ENSRNOT00000028732.7	Ctss	ENSRNOG00000021157	cathepsin S Source RGD Symbol Acc 621513
C08	SBR1206037	ENSRNOT00000038994.3	Cybb	ENSRNOG00000003622	cytochrome b-245 beta chain Source RGD Symbol Acc 620574
C09	SBR1190498	ENSRNOT00000018888.7	Cyld	ENSRNOG00000014048	CYLD lysine 63 deubiquitinase Source RGD Symbol Acc 1308346
C10	SBR1143482	ENSRNOT00000018427.4	Defb1	ENSRNOG00000013768	defensin beta 1 Source RGD Symbol Acc 619943
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1134760	059522.2	Dffa	000013603	DNA fragmentation factor subunit alpha Source RGD Symbol Acc 620334
C12	SBR1186950	ENSRNOT00000029587.2	Dpysl4	ENSRNOG00000027582	dihydropyrimidinase-like 4 Source RGD Symbol Acc 2409
D01	SBR1147622	ENSRNOT00000081017.1	Esr1	ENSRNOG00000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
D02	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG00000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
D03	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG00000002978	Fas ligand Source RGD Symbol Acc 3880
D04	SBR1200948	ENSRNOT00000009058.6	Foxi1	ENSRNOG00000006293	forkhead box I1 Source RGD Symbol Acc 1307421
D05	SBR1212620	ENSRNOT00000075796.2	Gaa	ENSRNOG00000047656	glucosidase, alpha, acid Source RGD Symbol Acc 735227
D06	SBR1179414	ENSRNOT00000007698.6	Gadd45a	ENSRNOG00000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
D07	SBR1177898	ENSRNOT00000006319.3	Galnt5	ENSRNOG00000004645	polypeptide N-acetylgalactosaminyltransferase 5 Source RGD Symbol Acc 620361
D08	SBR1181692	ENSRNOT00000005347.5	Grb2	ENSRNOG00000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
D09	SBR1156387	ENSRNOT00000003060.6	Hspbap1	ENSRNOG00000002241	HSPB1 associated protein 1 Source RGD Symbol Acc 620870
D10	SBR1118218	ENSRNOT00000058166.3	Htt	ENSRNOG00000011073	huntingtin Source RGD Symbol Acc 68337
D11	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG00000007468	interferon gamma Source RGD Symbol Acc 2866
D12	SBR1185495	ENSRNOT00000038780.6	Igf1	ENSRNOG00000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
E01	SBR1109208	ENSRNOT00000019267.6	Igf1r	ENSRNOG00000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
E02	SBR1158339	ENSRNOT00000027656.3	Ins2	ENSRNOG00000020405	insulin 2 Source RGD Symbol Acc 2916
E03	SBR1173162	ENSRNOT00000045545.3	Irgm	ENSRNOG00000031138	immunity-related GTPase M Source RGD Symbol Acc 1305163
E04	SBR1157751	ENSRNOT00000040737.2	Kcnip1	ENSRNOG00000005365	potassium voltage-gated channel interacting protein 1 Source RGD Symbol Acc 70886
E05	SBR1138789	ENSRNOT00000028544.5	Mag	ENSRNOG00000021023	myelin-associated glycoprotein Source RGD Symbol Acc 3035
E06	SBR1099345	ENSRNOT00000035060.4	Map1lc3a	ENSRNOG00000025443	microtubule-associated protein 1 light chain 3 alpha Source RGD Symbol Acc 735183
E07	SBR1144517	ENSRNOT00000065216.3	Mapk8	ENSRNOG00000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E08	SBR1136265	ENSRNOT00000013914.4	Api5	ENSRNOG00000009689	apoptosis inhibitor 5 Source RGD Symbol Acc 1309772
E09	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG00000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E10	SBR1157171	ENSRNOT00000020908.5	Nol3	ENSRNOG00000015588	nucleolar protein 3 Source RGD Symbol Acc 708558
E11	SBR1106098	ENSRNOT00000044784.1	Olr1583	ENSRNOG00000045582	olfactory receptor 1583 Source RGD Symbol Acc 1333448
E12	SBR1161994	ENSRNOT00000004232.5	Parp1	ENSRNOG00000003084	poly (ADP-ribose) polymerase 1 Source RGD Symbol Acc 2053
F01	SBR1191091	ENSRNOT00000011840.6	Parp2	ENSRNOG00000008892	poly (ADP-ribose) polymerase 2 Source RGD Symbol Acc 1310568
F02	SBR1160587	ENSRNOT00000066816.2	Pik3c3	ENSRNOG00000017840	phosphatidylinositol 3-kinase, catalytic subunit type 3 Source RGD Symbol Acc 620899
F03	SBR1174124	ENSRNOT00000028143.3	Pten	ENSRNOG00000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F04	SBR1108421	ENSRNOT00000064305.3	PVR	ENSRNOG00000019202	poliovirus receptor Source RGD Symbol Acc 3813
F05	SBR1180034	ENSRNOT00000032355.5	Rab25	ENSRNOG00000023640	RAB25, member RAS oncogene family Source RGD Symbol Acc 1308447
F06	SBR1159437	ENSRNOT00000027347.5	RGD1311517	ENSRNOG00000020199	similar to RIKEN cDNA 9430015G10 Source RGD Symbol Acc 1311517
F07	SBR1156703	ENSRNOT00000016260.8	Dennd4a	ENSRNOG00000011739	DENN domain containing 4A Source RGD Symbol Acc 1562639
F08	SBR1105085	ENSRNOT00000005226.4	Rps6kb1	ENSRNOG00000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683
F09	SBR1121544	ENSRNOT00000039247.4	Snca	ENSRNOG00000008656	synuclein alpha Source RGD Symbol Acc 3729
F10	SBR1146555	ENSRNOT00000012604.4	Spata2	ENSRNOG00000009207	spermatogenesis associated 2 Source RGD Symbol Acc 620754

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1193100	ENSRNOT00000059255.5	Sqstm1	ENSRNOG00000003147	sequestosome 1 Source RGD Symbol Acc 69287
F12	SBR1153809	ENSRNOT00000079019.1	Sycp2	ENSRNOG00000061690	synaptonemal complex protein 2 Source RGD Symbol Acc 69429
G01	SBR1145172	ENSRNOT00000079536.1	Maco1	ENSRNOG00000056156	macoilin 1 Source RGD Symbol Acc 1561685
G02	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	SBR1211981	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG00000038483	
G04	SBR1183920	ENSRNOT00000011344.5	Tnfrsf11b	ENSRNOG00000008336	TNF receptor superfamily member 11B Source RGD Symbol Acc 619802
G05	SBR1130829	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG00000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G06	SBR1199323	ENSRNOT00000027251.4	Tnfrsf4	ENSRNOG00000020106	TNF receptor superfamily member 4 Source RGD Symbol Acc 3920
G07	SBR1100398	ENSRNOT00000022968.4	Tnfrsf8	ENSRNOG00000016782	TNF receptor superfamily member 8 Source RGD Symbol Acc 3879
G08	SBR1172374	ENSRNOT00000046490.3	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G09	SBR1181541	ENSRNOT00000008253.6	Traf2	ENSRNOG00000006238	Tnf receptor-associated factor 2 Source RGD Symbol Acc 1310457
G10	SBR1213913	ENSRNOT00000034676.4	Txnl4b	ENSRNOG00000021379	thioredoxin-like 4B Source RGD Symbol Acc 1305127
G11	SBR1188200	ENSRNOT00000056790.3	Ulk1	ENSRNOG00000037505	unc-51 like autophagy activating kinase 1 Source RGD Symbol Acc 1589743
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.

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