

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

Rat p53 Signaling Pathway

Cat. no. 249950 SBRN-027ZR

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	Apaf1	Apex1	Atm	Bag1	Bax	Bcl3	Bcl2	Bid	Birc5	Bnip3	Brca1	Brca2
B	Blg2	Casp2	Casp9	Ccnb1	Ccne1	Ccng1	Ccnh	Cdc25a	Cdc25c	Cdk1	Cdk4	Cdkn1a
C	Cdkn2a	Stt3a	Chek2	Cul9	Dapk1	Dnmt1	E2f1	E2f3	Egfr	Egr1	AABR0705853 9.1	Ercc1
D	Esr1	Fadd	Fas	Faslg	Foxo3	Gadd45a	Hdac1	Hif1a	Igf1r	Il6	Jun	Kras
E	Lig4	Atr	Bak	Mdm2	Mdm4	Mlh1	Msh2	Myc	Myod1	Nf1	Nfkb1	Pcna
F	Pmaip1	Ppm1d	Prcl	Prkca	Plen	Ptfg1	Rb1	Rela	Sesn2	Rprm	Serpinb5	Sfn
G	AABR0704492 5.1	Stat1	LOC1036943 80	AABR0701832 3.1	Tp53	Tp53bp2	Tp63	Tp73	Wt1	Xrcc4	Xrcc5	Zmat3
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	SBR1126753	ENSRNOT00000010869.6	Apaf1	ENSRNOG0000008022	apoptotic peptidase activating factor 1 Source RGD Symbol Acc 620575
A02	SBR1185931	ENSRNOT00000087958.1	Apex1	ENSRNOG0000009663	apurinic/apryrimidinic endodeoxyribonuclease 1 Source RGD Symbol Acc 2126
A03	SBR1113073	ENSRNOT00000050555.3	Atm	ENSRNOG0000029773	ATM serine/threonine kinase Source RGD Symbol Acc 1593265
A04	SBR1157338	ENSRNOT00000011455.6	Bag1	ENSRNOG0000008277	Bcl2 associated athanogene 1 Source RGD Symbol Acc 1305203
A05	SBR1154566	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A06	SBR1162415	ENSRNOT00000025913.6	Bcl3	ENSRNOG0000043416	BCL3, transcription coactivator Source RGD Symbol Acc 1589465
A07	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A08	SBR1147619	ENSRNOT00000016776.2	Bid	ENSRNOG0000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
A09	SBR1130503	ENSRNOT00000072387.1	Birc5	ENSRNOG0000050819	baculoviral IAP repeat-containing 5 Source RGD Symbol Acc 70499
A10	SBR1178674	ENSRNOT00000023477.6	Bnip3	ENSRNOG0000017243	BCL2 interacting protein 3 Source RGD Symbol Acc 620800
A11	SBR1185089	ENSRNOT00000028109.3	Brca1	ENSRNOG0000020701	BRCA1, DNA repair associated Source RGD Symbol Acc 2218
A12	SBR1095330	ENSRNOT00000001475.7	Brca2	ENSRNOG0000001111	BRCA2, DNA repair associated Source RGD Symbol Acc 2219
B01	SBR1132920	ENSRNOT00000004408.3	Btg2	ENSRNOG0000003300	BTG anti-proliferation factor 2 Source RGD Symbol Acc 2225
B02	SBR1206768	ENSRNOT00000022543.5	Casp2	ENSRNOG0000016707	caspase 2 Source RGD Symbol Acc 69274
B03	SBR1175310	ENSRNOT000000085378.1	Casp9	ENSRNOG0000012944	caspase 9 Source RGD Symbol Acc 61867
B04	SBR1142548	ENSRNOT000000082846.1	Ccnb1	ENSRNOG0000058539	cyclin B1 Source RGD Symbol Acc 2291
B05	SBR1171340	ENSRNOT00000020014.4	Ccne1	ENSRNOG0000014786	cyclin E1 Source RGD Symbol Acc 2294
B06	SBR1159654	ENSRNOT00000065633.3	Ccng1	ENSRNOG0000003256	cyclin G1 Source RGD Symbol Acc 2295
B07	SBR1112912	ENSRNOT00000049423.1	Ccnh	ENSRNOG0000031656	cyclin H Source RGD Symbol Acc 69419
B08	SBR1114792	ENSRNOT00000028141.7	Cdc25a	ENSRNOG0000020737	cell division cycle 25A Source RGD Symbol Acc 621498
B09	SBR1194259	ENSRNOT00000037368.6	Cdc25c	ENSRNOG0000024008	cell division cycle 25C Source RGD Symbol Acc 1311875
B10	SBR1169863	ENSRNOT00000081113.1	Cdk1	ENSRNOG0000000632	cyclin-dependent kinase 1 Source RGD Symbol Acc 2319
B11	SBR1175190	ENSRNOT00000031796.4	Cdk4	ENSRNOG0000025602	cyclin-dependent kinase 4 Source RGD Symbol Acc 621120
B12	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
C01	SBR1138605	ENSRNOT00000084293.1	Cdkn2a	ENSRNOG0000059837	cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323
C02	SBR1115970	ENSRNOT00000043518.4	Stt3a	ENSRNOG0000031896	STT3A, catalytic subunit of the oligosaccharyltransferase complex Source RGD Symbol Acc 1565793
C03	SBR1132181	ENSRNOT00000085591.1	Chek2	ENSRNOG0000037509	checkpoint kinase 2 Source RGD Symbol Acc 621543
C04	SBR1167895	ENSRNOT00000080815.1	Cul9	ENSRNOG0000018372	cullin 9 Source RGD Symbol Acc 1562008
C05	SBR1155991	ENSRNOT00000080750.1	Dapk1	ENSRNOG0000018198	death associated protein kinase 1 Source RGD Symbol Acc 1311629
C06	SBR1100410	ENSRNOT00000064932.4	Dnmt1	ENSRNOG0000039859	DNA methyltransferase 1 Source RGD Symbol Acc 620979
C07	SBR1191846	ENSRNOT00000022428.6	E2f1	ENSRNOG0000016708	N-terminal EF-hand calcium binding protein 3 Source RGD Symbol Acc 1310124
C08	SBR1164367	ENSRNOT00000050261.5	E2f3	ENSRNOG0000029273	E2F transcription factor 3 Source RGD Symbol Acc 1561600
C09	SBR1196436	ENSRNOT00000006087.2	Egfr	ENSRNOG0000004332	epidermal growth factor receptor Source RGD Symbol Acc 2543
C10	SBR1216566	ENSRNOT00000026303.4	Egr1	ENSRNOG0000019422	early growth response 1 Source RGD Symbol Acc 2544
		ENSRNOT000000	AABR0705	ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1104886	000206.7	8539.1	000000190	
C12	SBR1128428	ENSRNOT00000024113.5	Ercc1	ENSRNOG0000017839	ERCC excision repair 1, endonuclease non-catalytic subunit Source RGD Symbol Acc 1306992
D01	SBR1147622	ENSRNOT00000081017.1	Esr1	ENSRNOG0000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
D02	SBR1202965	ENSRNOT00000075089.3	Fadd	ENSRNOG0000047035	Fas associated via death domain Source RGD Symbol Acc 628700
D03	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
D04	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
D05	SBR1161322	ENSRNOT00000000327.5	Foxo3	ENSRNOG0000000299	forkhead box O3 Source RGD Symbol Acc 1309196
D06	SBR1179414	ENSRNOT00000007698.6	Gadd45a	ENSRNOG0000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
D07	SBR1151584	ENSRNOT00000012854.6	Hdac1	ENSRNOG0000009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
D08	SBR1184753	ENSRNOT00000077935.1	Hif1a	ENSRNOG0000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
D09	SBR1109208	ENSRNOT00000019267.6	Igf1r	ENSRNOG0000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
D10	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
D11	SBR1133226	ENSRNOT00000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D12	SBR1196578	ENSRNOT00000012588.4	Kras	ENSRNOG0000009338	KRAS proto-oncogene, GTPase Source RGD Symbol Acc 2981
E01	SBR1212635	ENSRNOT00000019615.5	Lig4	ENSRNOG0000014605	DNA ligase 4 Source RGD Symbol Acc 1304639
E02	SBR1199416	ENSRNOT00000049967.5	Atr	ENSRNOG0000010027	ATR serine/threonine kinase Source RGD Symbol Acc 1305796
E03	SBR1113372	ENSRNOT00000024695.6	Bok	ENSRNOG0000018214	BCL2 family apoptosis regulator BOK Source RGD Symbol Acc 70984
E04	SBR1110929	ENSRNOT00000066767.2	Mdm2	ENSRNOG0000006304	MDM2 proto-oncogene Source RGD Symbol Acc 1305332
E05	SBR1113815	ENSRNOT00000012984.5	Mdm4	ENSRNOG0000009696	MDM4, p53 regulator Source RGD Symbol Acc 1309306
E06	SBR1108786	ENSRNOT00000081718.1	Mlh1	ENSRNOG0000033809	mutL homolog 1 Source RGD Symbol Acc 620937
E07	SBR1147710	ENSRNOT00000021538.7	Msh2	ENSRNOG0000015796	mutS homolog 2 Source RGD Symbol Acc 620786
E08	SBR1106364	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E09	SBR1143996	ENSRNOT00000015109.2	Myod1	ENSRNOG0000011306	myogenic differentiation 1 Source RGD Symbol Acc 631429
E10	SBR1120157	ENSRNOT00000089538.1	Nf1	ENSRNOG0000013780	neurofibromin 1 Source RGD Symbol Acc 3168
E11	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E12	SBR1212532	ENSRNOT00000028887.6	Pcna	ENSRNOG0000021264	proliferating cell nuclear antigen Source RGD Symbol Acc 3269
F01	SBR1112809	ENSRNOT00000025362.3	Pmaip1	ENSRNOG0000018770	phorbol-12-myristate-13-acetate-induced protein 1 Source RGD Symbol Acc 1359266
F02	SBR1167655	ENSRNOT00000004540.6	Ppm1d	ENSRNOG0000003329	protein phosphatase, Mg2+/Mn2+ dependent, 1D Source RGD Symbol Acc 1305460
F03	SBR1196457	ENSRNOT00000017532.5	Prc1	ENSRNOG0000013057	protein regulator of cytokinesis 1 Source RGD Symbol Acc 1311754
F04	SBR1097570	ENSRNOT00000055073.4	Prkca	ENSRNOG0000003491	protein kinase C, alpha Source RGD Symbol Acc 3395
F05	SBR1174124	ENSRNOT00000028143.3	Pten	ENSRNOG0000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F06	SBR1183484	ENSRNOT00000005070.5	Ptfg1	ENSRNOG0000003802	pituitary tumor-transforming 1 Source RGD Symbol Acc 68359
F07	SBR1123205	ENSRNOT00000021752.5	Rb1	ENSRNOG0000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F08	SBR1138204	ENSRNOT00000045233.3	Rela	ENSRNOG0000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
F09	SBR1191837	ENSRNOT00000067455.3	Sesn2	ENSRNOG0000042785	sestrin 2 Source RGD Symbol Acc 1566319
F10	SBR1143672	ENSRNOT00000006784.3	Rprm	ENSRNOG0000005109	reprimin, TP53 dependent G2 arrest mediator homolog Source RGD Symbol Acc 1595512

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1138369	ENSRNOT00000003625.7	Serpinb5	ENSRNOG0000002640	serpin family B member 5 Source RGD Symbol Acc 69342
F12	SBR1202515	ENSRNOT00000043959.4	Sfn	ENSRNOG00000033153	stratifin Source RGD Symbol Acc 1304729
G01	SBR1134550	ENSRNOT00000078739.1	AABR07044925.1	ENSRNOG00000051592	sirtuin 1 Source NCBI gene Acc 309757
G02	SBR1199428	ENSRNOT00000080522.1	Stat1	ENSRNOG0000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
G03	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G04	SBR1211981	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG00000038483	
G05	SBR1172374	ENSRNOT00000046490.3	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G06	SBR1133787	ENSRNOT00000004330.7	Tp53bp2	ENSRNOG0000003237	tumor protein p53 binding protein, 2 Source RGD Symbol Acc 1305461
G07	SBR1198629	ENSRNOT00000067251.4	Tp63	ENSRNOG0000001924	tumor protein p63 Source RGD Symbol Acc 620863
G08	SBR1108065	ENSRNOT00000055398.2	Tp73	ENSRNOG0000024707	tumor protein p73 Source RGD Symbol Acc 1307083
G09	SBR1166666	ENSRNOT00000067940.3	Wt1	ENSRNOG0000013074	Wilms tumor 1 Source RGD Symbol Acc 3974
G10	SBR1157632	ENSRNOT00000045850.2	Xrcc4	ENSRNOG0000029966	X-ray repair cross complementing 4 Source RGD Symbol Acc 1359573
G11	SBR1103076	ENSRNOT00000021656.4	Xrcc5	ENSRNOG0000016105	X-ray repair cross complementing 5 Source RGD Symbol Acc 3976
G12	SBR1181842	ENSRNOT00000013858.7	Zmat3	ENSRNOG0000010119	zinc finger, matrin type 3 Source RGD Symbol Acc 620134
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	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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