

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

Rat Cancer PathwayFinder™

Cat. no. 249950 SBRN-033ZA

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	Acly	Acl4	Adm	Angpt1	Angpt2	Apa1	Arnt	Atp5f1a	Atrx	Aurka	Bcl2l11	Birc3
B	Bmi1	Car9	Casp2	Casp7	Casp9	Ccl2	Ccnd2	Ccnd3	Cdc20	Cdh2	Cflar	Cox5a
C	Cpt2	Ddb2	Dkc1	Dsp	E2f4	Epo	Ercc3	Ercc5	Ets2	Faslg	Fgf2	Fit1
D	Foxc2	G6pd	Gadd45g	Gpd2	Gsc	Hmox1	Igfbp3	Igfbp5	Igfbp7	Ing1	Kdr	Krt14
E	Pgk1	Lig4	Lpl	Map2k1	Map2k3	Mcm2	Mki67	Nol3	Ocln	Pfkf	Pgf	Pinx1
F	Ppp1r15a	Serpib2	Serpinf1	Sirt2	Skp2	Sk2a1	Snai1	Snai2	Snai3	Sod1	Sox10	Stmn1
G	Tbx2	Tek	Tep1	Terf2ip	Tinf2	Tnks	Pat1	Uqcrf1	Vegfc	Wee1	Xiap	Xrcc4
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	SBR1145899	ENSRNOT00000023447.6	Acly	ENSRNOG0000016924	ATP citrate lyase Source RGD Symbol Acc 2018
A02	SBR1194850	ENSRNOT00000026057.6	Acsl4	ENSRNOG0000019180	acyl-CoA synthetase long-chain family member 4 Source RGD Symbol Acc 69401
A03	SBR1135593	ENSRNOT00000036718.1	Adm	ENSRNOG0000027030	adrenomedullin Source RGD Symbol Acc 2047
A04	SBR1097173	ENSRNOT00000007979.6	Angpt1	ENSRNOG0000005854	angiotensinogen 1 Source RGD Symbol Acc 628896
A05	SBR1190070	ENSRNOT00000022774.6	Angpt2	ENSRNOG0000016696	angiotensinogen 2 Source RGD Symbol Acc 621861
A06	SBR1126753	ENSRNOT00000010869.6	Apaf1	ENSRNOG0000008022	apoptotic peptidase activating factor 1 Source RGD Symbol Acc 620575
A07	SBR1145957	ENSRNOT00000091681.1	Arnt	ENSRNOG00000031174	aryl hydrocarbon receptor nuclear translocator Source RGD Symbol Acc 2153
A08	SBR1114507	ENSRNOT00000022892.5	Atp5f1a	ENSRNOG0000017032	ATP synthase F1 subunit alpha Source RGD Symbol Acc 619993
A09	SBR1109006	ENSRNOT00000091284.1	Atrx	ENSRNOG00000056703	ATRX, chromatin remodeler Source RGD Symbol Acc 619795
A10	SBR1180416	ENSRNOT00000055102.4	Aurka	ENSRNOG0000004479	aurora kinase A Source RGD Symbol Acc 628895
A11	SBR1103294	ENSRNOT00000022596.6	Bcl2l11	ENSRNOG0000016551	BCL2 like 11 Source RGD Symbol Acc 628774
A12	SBR1181460	ENSRNOT00000090774.1	Birc3	ENSRNOG0000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
B01	SBR1175404	ENSRNOT00000064257.2	Bmi1	ENSRNOG0000016585	BM11 proto-oncogene, polycomb ring finger Source RGD Symbol Acc 1307403
B02	SBR1133743	ENSRNOT00000023060.5	Car9	ENSRNOG0000017073	carbonic anhydrase 9 Source RGD Symbol Acc 1306426
B03	SBR1206768	ENSRNOT00000022543.5	Casp2	ENSRNOG0000016707	caspase 2 Source RGD Symbol Acc 69274
B04	SBR1124602	ENSRNOT00000080511.1	Casp7	ENSRNOG00000056216	caspase 7 Source RGD Symbol Acc 620944
B05	SBR1175310	ENSRNOT00000085378.1	Casp9	ENSRNOG0000012944	caspase 9 Source RGD Symbol Acc 61867
B06	SBR1165601	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B07	SBR1095869	ENSRNOT00000086440.1	Ccnd2	ENSRNOG00000057710	cyclin D2 Source RGD Symbol Acc 621083
B08	SBR1162864	ENSRNOT00000074217.1	Ccnd3	ENSRNOG00000050258	cyclin D3 Source RGD Symbol Acc 2293
B09	SBR1121532	ENSRNOT00000036151.4	Cdc20	ENSRNOG00000028415	cell division cycle 20 Source RGD Symbol Acc 620477
B10	SBR1148414	ENSRNOT00000021170.6	Cdh2	ENSRNOG0000015602	cadherin 2 Source RGD Symbol Acc 69280
B11	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
B12	SBR1157317	ENSRNOT00000025525.4	Cox5a	ENSRNOG0000018816	cytochrome c oxidase subunit 5A Source RGD Symbol Acc 620607
C01	SBR1129520	ENSRNOT00000016954.3	Cpt2	ENSRNOG0000012443	carnitine palmitoyltransferase 2 Source RGD Symbol Acc 2398
C02	SBR1172394	ENSRNOT00000018998.8	Ddb2	ENSRNOG0000014071	damage specific DNA binding protein 2 Source RGD Symbol Acc 1310164
C03	SBR1199468	ENSRNOT00000089847.1	Dkc1	ENSRNOG00000055562	dyskerin pseudouridine synthase 1 Source RGD Symbol Acc 621780
C04	SBR1121361	ENSRNOT00000018649.6	Dsp	ENSRNOG0000013928	desmoplakin Source RGD Symbol Acc 1305794
C05	SBR1202978	ENSRNOT00000021145.7	E2f4	ENSRNOG0000015708	E2F transcription factor 4 Source RGD Symbol Acc 2322129
C06	SBR1147729	ENSRNOT00000001914.4	Epo	ENSRNOG0000001412	erythropoietin Source RGD Symbol Acc 2559
C07	SBR1211602	ENSRNOT00000018422.6	Ercc3	ENSRNOG0000013180	ERCC excision repair 3, TFIIH core complex helicase subunit Source RGD Symbol Acc 1307139
C08	SBR1141415	ENSRNOT00000059349.4	Ercc5	ENSRNOG00000022812	ERCC excision repair 5, endonuclease Source RGD Symbol Acc 1586176
C09	SBR1209269	ENSRNOT00000002247.6	Ets2	ENSRNOG0000001647	ETS proto-oncogene 2, transcription factor Source RGD Symbol Acc 1584977
C10	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1185708	023388.5	Fgf2	000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C12	SBR1197248	ENSRNOT0000001248.3	Fli1	ENSRNOG0000000940	FMS-related tyrosine kinase 1 Source RGD Symbol Acc 2621
D01	SBR1124840	ENSRNOT00000072369.1	Foxc2	ENSRNOG00000047446	forkhead box C2 Source RGD Symbol Acc 621703
D02	SBR1179522	ENSRNOT00000080887.1	G6pd	ENSRNOG00000056728	glucose-6-phosphate dehydrogenase Source RGD Symbol Acc 2645
D03	SBR1194608	ENSRNOT00000018252.7	Gadd45g	ENSRNOG00000013090	growth arrest and DNA-damage-inducible, gamma Source RGD Symbol Acc 1311796
D04	SBR1175325	ENSRNOT00000044419.4	Gpd2	ENSRNOG00000033824	glycerol-3-phosphate dehydrogenase 2 Source RGD Symbol Acc 2726
D05	SBR1202297	ENSRNOT00000014204.5	Gsc	ENSRNOG0000010605	goosecoid homeobox Source RGD Symbol Acc 631425
D06	SBR1146734	ENSRNOT00000019192.6	Hmox1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D07	SBR1152057	ENSRNOT00000088355.1	Igfbp3	ENSRNOG00000061910	insulin-like growth factor binding protein 3 Source RGD Symbol Acc 2874
D08	SBR1137301	ENSRNOT00000079493.1	Igfbp5	ENSRNOG00000017206	insulin-like growth factor binding protein 5 Source RGD Symbol Acc 2876
D09	SBR1131304	ENSRNOT00000002809.4	Igfbp7	ENSRNOG0000002050	insulin-like growth factor binding protein 7 Source RGD Symbol Acc 1306201
D10	SBR1134357	ENSRNOT00000019454.7	Ing1	ENSRNOG0000014520	inhibitor of growth family, member 1 Source RGD Symbol Acc 1306330
D11	SBR1173378	ENSRNOT00000071405.2	Kdr	ENSRNOG00000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
D12	SBR1106051	ENSRNOT00000083895.1	Krt14	ENSRNOG0000003899	keratin 14 Source RGD Symbol Acc 1307463
E01	SBR1149927	ENSRNOT00000077604.1	Pgk1	ENSRNOG00000058249	phosphoglycerate kinase 1 Source RGD Symbol Acc 619878
E02	SBR1212635	ENSRNOT00000019615.5	Lig4	ENSRNOG0000014605	DNA ligase 4 Source RGD Symbol Acc 1304639
E03	SBR1197775	ENSRNOT00000016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E04	SBR1111011	ENSRNOT00000013933.6	Map2k1	ENSRNOG0000010176	mitogen activated protein kinase kinase 1 Source RGD Symbol Acc 70495
E05	SBR1124771	ENSRNOT00000073792.2	Map2k3	ENSRNOG0000049132	mitogen activated protein kinase kinase 3 Source RGD Symbol Acc 1306620
E06	SBR1132926	ENSRNOT00000022231.6	Mcm2	ENSRNOG0000016316	minichromosome maintenance complex component 2 Source RGD Symbol Acc 1305577
E07	SBR1114480	ENSRNOT00000038176.5	Mki67	ENSRNOG0000028137	marker of proliferation Ki-67 Source RGD Symbol Acc 1305476
E08	SBR1157171	ENSRNOT00000020908.5	Nol3	ENSRNOG0000015588	nucleolar protein 3 Source RGD Symbol Acc 708558
E09	SBR1197094	ENSRNOT00000084667.1	Ocln	ENSRNOG0000018297	occludin Source RGD Symbol Acc 620089
E10	SBR1127317	ENSRNOT00000001625.5	Pfkf	ENSRNOG0000001214	phosphofructokinase, liver type Source RGD Symbol Acc 3311
E11	SBR1124947	ENSRNOT00000007790.5	Pgf	ENSRNOG0000005650	placental growth factor Source RGD Symbol Acc 619850
E12	SBR1128321	ENSRNOT00000016027.5	Pinx1	ENSRNOG0000012012	PIN2/TERF1 interacting, telomerase inhibitor 1 Source RGD Symbol Acc 1566025
F01	SBR1209656	ENSRNOT00000044788.4	Ppp1r15a	ENSRNOG0000020938	protein phosphatase 1, regulatory subunit 15A Source RGD Symbol Acc 621526
F02	SBR1169254	ENSRNOT00000003409.5	Serpinb2	ENSRNOG0000002460	serpin family B member 2 Source RGD Symbol Acc 621823
F03	SBR1135458	ENSRNOT00000004313.5	Serpinf1	ENSRNOG00000003172	serpin family F member 1 Source RGD Symbol Acc 631369
F04	SBR1153037	ENSRNOT00000064153.1	Sirt2	ENSRNOG0000020102	sirtuin 2 Source RGD Symbol Acc 621481
F05	SBR1113740	ENSRNOT00000089178.1	Skp2	ENSRNOG0000059059	S-phase kinase associated protein 2 Source RGD Symbol Acc 1562456
F06	SBR1109042	ENSRNOT00000064452.2	Slc2a1	ENSRNOG0000007284	solute carrier family 2 member 1 Source RGD Symbol Acc 3704
F07	SBR1162553	ENSRNOT00000077581.1	Snai1	ENSRNOG0000009594	snail family transcriptional repressor 1 Source RGD Symbol Acc 620758
F08	SBR1127823	ENSRNOT00000073049.2	Snai2	ENSRNOG00000047699	snail family transcriptional repressor 2 Source RGD Symbol Acc 3722
F09	SBR1209759	ENSRNOT00000018387.6	Snai3	ENSRNOG0000013586	snail family transcriptional repressor 3 Source RGD Symbol Acc 1309658
F10	SBR1136942	ENSRNOT00000002885.6	Sod1	ENSRNOG0000002115	superoxide dismutase 1 Source RGD Symbol Acc 3731

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1171560	ENSRNOT00000015283.3	Sox10	ENSRNOG0000011305	SRY box 10 Source RGD Symbol Acc 3735
F12	SBR1151756	ENSRNOT00000022574.5	Simn1	ENSRNOG0000016810	stathmin 1 Source RGD Symbol Acc 2992
G01	SBR1194998	ENSRNOT00000004698.7	Tbx2	ENSRNOG0000003517	T-box 2 Source RGD Symbol Acc 1311014
G02	SBR1214417	ENSRNOT00000032248.3	Tek	ENSRNOG0000008587	TEK receptor tyrosine kinase Source RGD Symbol Acc 620980
G03	SBR1168776	ENSRNOT00000088981.1	Tep1	ENSRNOG0000051706	telomerase associated protein 1 Source RGD Symbol Acc 3869
G04	SBR1124114	ENSRNOT00000014660.6	Terf2ip	ENSRNOG0000010712	TERF2 interacting protein Source RGD Symbol Acc 1309684
G05	SBR1125369	ENSRNOT00000027362.5	Tinf2	ENSRNOG0000020189	TERF1 interacting nuclear factor 2 Source RGD Symbol Acc 1359192
G06	SBR1207293	ENSRNOT00000015813.6	Tnks	ENSRNOG0000011625	tankyrase Source RGD Symbol Acc 1308784
G07	SBR1201420	ENSRNOT00000060459.3	Pot1	ENSRNOG0000019986	protection of telomeres 1 Source RGD Symbol Acc 1562696
G08	SBR1130994	ENSRNOT00000024609.6	Uqcrcf1	ENSRNOG0000018281	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 Source RGD Symbol Acc 628838
G09	SBR1127903	ENSRNOT00000015529.4	Vegfc	ENSRNOG0000011416	vascular endothelial growth factor C Source RGD Symbol Acc 619800
G10	SBR1209055	ENSRNOT00000013362.5	Wee1	ENSRNOG0000010017	WEE1 G2 checkpoint kinase Source RGD Symbol Acc 1307895
G11	SBR1144925	ENSRNOT00000009336.3	Xiap	ENSRNOG0000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
G12	SBR1157632	ENSRNOT00000045850.2	Xrcc4	ENSRNOG0000029966	X-ray repair cross complementing 4 Source RGD Symbol Acc 1359573
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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