

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

Rat Liver Cancer

Cat. no. 249950 SBRN-133ZA

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	Adam17	Akt1	Angpt2	Bax	Bcl2	Bcl2l1	Bid	Birc2	Birc5	Casp8	Ccl5	Ccnd1
B	Ccnd2	Cdh1	Cdh13	Cdkn1a	Cdkn1b	Cdkn2a	Cflar	Ctnnb1	Cxcr4	Dab2ip	Dlc1	E2f1
C	Egf	Egfr	AABR0705853 9.1	Fadd	Fas	Cav1	Fhl1	Fzd7	Gadd45b	Gstp1	Hgf	Hhip
D	Hras	Igf2	Igfbp1	Igfbp3	Irs1	Iigb1	Kdr	Lef1	Ccl3	Met	Msh2	Msh3
E	Mtdh	Myc	Nfkb1	Nras	Opcml	Pdgfra	Pin1	Pten	Ptgs2	Plk2	Pycard	Rac1
F	Rassf1	Rb1	Reln	Rhoa	Runx3	Sfrp2	Smad4	Smad7	Socs1	Socs3	Slat3	Tcf4
G	Tert	Tgfa	Tgfb1	Tgfb2	Tlr4	AABR0701832 3.1	Tnfrsf10	Tp53	Vegfa	Wt1	Xiap	Yap1
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	SBR1157595	ENSRNOT00000081110.1	Adam17	ENSRNOG0000060694	ADAM metallopeptidase domain 17 Source RGD Symbol Acc 620404
A02	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	SBR1190070	ENSRNOT00000022774.6	Angpt2	ENSRNOG0000016696	angiopoietin 2 Source RGD Symbol Acc 621861
A04	SBR1154566	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A05	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A06	SBR1205791	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
A07	SBR1147619	ENSRNOT00000016776.2	Bid	ENSRNOG0000012439	BH3 interacting domain death agonist Source RGD Symbol Acc 620160
A08	SBR1099985	ENSRNOT00000014560.6	Birc2	ENSRNOG0000010602	baculoviral IAP repeat-containing 2 Source RGD Symbol Acc 620690
A09	SBR1130503	ENSRNOT00000072387.1	Birc5	ENSRNOG0000050819	baculoviral IAP repeat-containing 5 Source RGD Symbol Acc 70499
A10	SBR1182801	ENSRNOT00000016613.4	Casp8	ENSRNOG0000012331	caspase 8 Source RGD Symbol Acc 620945
A11	SBR1094349	ENSRNOT00000014865.6	Ccl5	ENSRNOG0000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
A12	SBR1211432	ENSRNOT00000028411.3	Ccnd1	ENSRNOG0000020918	cyclin D1 Source RGD Symbol Acc 68384
B01	SBR1095869	ENSRNOT00000086440.1	Ccnd2	ENSRNOG0000057710	cyclin D2 Source RGD Symbol Acc 621083
B02	SBR1170192	ENSRNOT00000027346.2	Cdh1	ENSRNOG0000020151	cadherin 1 Source RGD Symbol Acc 69279
B03	SBR1129959	ENSRNOT00000077053.2	Cdh13	ENSRNOG0000014371	cadherin 13 Source RGD Symbol Acc 619745
B04	SBR1145142	ENSRNOT00000091731.1	Cdkn1a	ENSRNOG0000000521	cyclin-dependent kinase inhibitor 1A Source RGD Symbol Acc 69328
B05	SBR1124365	ENSRNOT00000049848.1	Cdkn1b	ENSRNOG0000007249	cyclin-dependent kinase inhibitor 1B Source RGD Symbol Acc 69062
B06	SBR1138605	ENSRNOT00000084293.1	Cdkn2a	ENSRNOG0000059837	cyclin-dependent kinase inhibitor 2A Source RGD Symbol Acc 2323
B07	SBR1105415	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
B08	SBR1143136	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
B09	SBR1129817	ENSRNOT00000005143.6	Cxcr4	ENSRNOG0000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
B10	SBR1128245	ENSRNOT00000080760.1	Dab2ip	ENSRNOG0000055226	DAB2 interacting protein Source RGD Symbol Acc 621686
B11	SBR1200603	ENSRNOT00000014924.3	Dlc1	ENSRNOG0000010780	DLC1 Rho GTPase activating protein Source RGD Symbol Acc 68416
B12	SBR1191846	ENSRNOT00000022428.6	E2f1	ENSRNOG0000016708	N-terminal EF-hand calcium binding protein 3 Source RGD Symbol Acc 1310124
C01	SBR1200927	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
C02	SBR1196436	ENSRNOT00000006087.2	Egfr	ENSRNOG0000004332	epidermal growth factor receptor Source RGD Symbol Acc 2543
C03	SBR1104886	ENSRNOT00000000206.7	AABR07058539.1	ENSRNOG0000000190	
C04	SBR1202965	ENSRNOT00000075089.3	Fadd	ENSRNOG0000047035	Fas associated via death domain Source RGD Symbol Acc 628700
C05	SBR1159525	ENSRNOT00000025928.5	Fas	ENSRNOG0000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C06	SBR1108638	ENSRNOT00000078250.1	Cav1	ENSRNOG0000056836	caveolin 1 Source RGD Symbol Acc 2280
C07	SBR1197248	ENSRNOT00000001248.3	Flt1	ENSRNOG0000000940	FMS-related tyrosine kinase 1 Source RGD Symbol Acc 2621
C08	SBR1124398	ENSRNOT00000021569.6	Fzd7	ENSRNOG0000016119	frizzled class receptor 7 Source RGD Symbol Acc 2321905
C09	SBR1101583	ENSRNOT00000026871.4	Gadd45b	ENSRNOG0000019822	growth arrest and DNA-damage-inducible, beta Source RGD Symbol Acc 1309080
C10	SBR1125046	ENSRNOT00000024601.4	Gstp1	ENSRNOG0000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1147127	009763.5	Hgf	000007027	hepatocyte growth factor Source RGD Symbol Acc 2794
C12	SBR1138408	ENSRNOT00000024616.7	Hhip	ENSRNOG0000018268	Hedgehog-interacting protein Source RGD Symbol Acc 1564108
D01	SBR1204952	ENSRNOT00000079464.1	Hras	ENSRNOG0000016611	HRas proto-oncogene, GTPase Source RGD Symbol Acc 2827
D02	SBR1106101	ENSRNOT00000050760.3	Igf2	ENSRNOG0000020369	insulin-like growth factor 2 Source RGD Symbol Acc 2870
D03	SBR1203028	ENSRNOT00000077177.1	Igfbp1	ENSRNOG0000058780	insulin-like growth factor binding protein 1 Source RGD Symbol Acc 2872
D04	SBR1152057	ENSRNOT00000088355.1	Igfbp3	ENSRNOG0000061910	insulin-like growth factor binding protein 3 Source RGD Symbol Acc 2874
D05	SBR1132302	ENSRNOT00000019579.5	Irs1	ENSRNOG0000014597	insulin receptor substrate 1 Source RGD Symbol Acc 2922
D06	SBR1105686	ENSRNOT00000014785.5	Itgb1	ENSRNOG0000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D07	SBR1173378	ENSRNOT00000071405.2	Kdr	ENSRNOG0000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
D08	SBR1100877	ENSRNOT00000013694.3	Lef1	ENSRNOG0000010121	lymphoid enhancer binding factor 1 Source RGD Symbol Acc 620241
D09	SBR1146662	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
D10	SBR1107950	ENSRNOT00000086902.1	Met	ENSRNOG0000052745	MET proto-oncogene, receptor tyrosine kinase Source RGD Symbol Acc 3082
D11	SBR1147710	ENSRNOT00000021538.7	Msh2	ENSRNOG0000015796	mutS homolog 2 Source RGD Symbol Acc 620786
D12	SBR1193318	ENSRNOT00000018449.7	Msh3	ENSRNOG0000013673	mutS homolog 3 Source RGD Symbol Acc 1563954
E01	SBR1102731	ENSRNOT00000009989.3	Mtdh	ENSRNOG0000006870	metadherin Source RGD Symbol Acc 620992
E02	SBR1106364	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E03	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E04	SBR1160671	ENSRNOT00000039572.3	Nras	ENSRNOG0000023079	NRAS proto-oncogene, GTPase Source RGD Symbol Acc 3205
E05	SBR1136843	ENSRNOT00000090643.1	Opcml	ENSRNOG0000023809	opioid binding protein/cell adhesion molecule-like Source RGD Symbol Acc 620635
E06	SBR1195557	ENSRNOT00000003077.5	Pdgfra	ENSRNOG0000002244	platelet derived growth factor receptor alpha Source RGD Symbol Acc 3284
E07	SBR1199012	ENSRNOT00000027818.5	Pin1	ENSRNOG0000020474	peptidylprolyl cis/trans isomerase, NIMA-interacting 1 Source RGD Symbol Acc 1310299
E08	SBR1174124	ENSRNOT00000028143.3	Pten	ENSRNOG0000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
E09	SBR1122148	ENSRNOT00000003567.4	Ptgs2	ENSRNOG0000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
E10	SBR1118067	ENSRNOT00000079599.1	Plk2	ENSRNOG0000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
E11	SBR1158649	ENSRNOT00000026699.4	Pycard	ENSRNOG0000019675	PYD and CARD domain containing Source RGD Symbol Acc 628637
E12	SBR1123146	ENSRNOT00000001417.5	Rac1	ENSRNOG0000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F01	SBR1215724	ENSRNOT00000037363.4	Rassf1	ENSRNOG00000021548	Ras association domain family member 1 Source RGD Symbol Acc 1359383
F02	SBR1123205	ENSRNOT00000021752.5	Rb1	ENSRNOG0000016029	RB transcriptional corepressor 1 Source RGD Symbol Acc 3540
F03	SBR1110791	ENSRNOT00000010521.8	Reln	ENSRNOG0000021441	reelin Source RGD Symbol Acc 3553
F04	SBR1125110	ENSRNOT00000071664.2	Rhoa	ENSRNOG0000050519	ras homolog family member A Source RGD Symbol Acc 619921
F05	SBR1161342	ENSRNOT00000086650.1	Runx3	ENSRNOG0000054217	runt-related transcription factor 3 Source RGD Symbol Acc 620082
F06	SBR1157148	ENSRNOT00000012658.6	Sfrp2	ENSRNOG0000009465	secreted frizzled-related protein 2 Source RGD Symbol Acc 735163
F07	SBR1183988	ENSRNOT00000090198.1	Smad4	ENSRNOG0000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F08	SBR1125360	ENSRNOT00000024831.4	Smad7	ENSRNOG0000018359	SMAD family member 7 Source RGD Symbol Acc 69314
F09	SBR1119822	ENSRNOT00000003458.3	Socs1	ENSRNOG0000002568	suppressor of cytokine signaling 1 Source RGD Symbol Acc 69272
F10	SBR1139184	ENSRNOT00000003940.3	Socs3	ENSRNOG0000002946	suppressor of cytokine signaling 3 Source RGD Symbol Acc 621087

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1138417	ENSRNOT00000026760.4	Stat3	ENSRNOG0000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
F12	SBR1134900	ENSRNOT00000081797.1	Tcf4	ENSRNOG0000012405	transcription factor 4 Source RGD Symbol Acc 69271
G01	SBR1196369	ENSRNOT00000022683.4	Tert	ENSRNOG0000025327	telomerase reverse transcriptase Source RGD Symbol Acc 70494
G02	SBR1118717	ENSRNOT00000057441.4	Tgfa	ENSRNOG0000016182	transforming growth factor alpha Source RGD Symbol Acc 3849
G03	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G04	SBR1102376	ENSRNOT00000037883.4	Tgfb2	ENSRNOG0000013265	transforming growth factor, beta receptor 2 Source RGD Symbol Acc 69651
G05	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G06	SBR1211981	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG0000038483	
G07	SBR1107258	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG0000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G08	SBR1172374	ENSRNOT00000046490.3	Tp53	ENSRNOG0000010756	tumor protein p53 Source RGD Symbol Acc 3889
G09	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G10	SBR1166666	ENSRNOT00000067940.3	Wt1	ENSRNOG0000013074	Wilms tumor 1 Source RGD Symbol Acc 3974
G11	SBR1144925	ENSRNOT00000009336.3	Xiap	ENSRNOG0000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
G12	SBR1113824	ENSRNOT00000085285.1	Yap1	ENSRNOG0000005933	yes-associated protein 1 Source RGD Symbol Acc 1306035
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 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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