

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

Rat Fibrosis

Cat. no. 249950 SBRN-120ZR

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	Acta2	Agt	Akt1	Bcl2	Bmp7	Cav1	Ccl11	Ccl12	Ccl3	Ccr7	Cebpb	Col1a2
B	Col3a1	Con2	Cxcr4	Dcn	Edn1	Egf	Eng	Faslg	Grem1	Hgf	Ifng	Il10
C	Il13	Il13ra2	Il1a	Il1b	Il4	Il5	Ilk	Inhbe	Itga1	Itga2	Itga3	Itgav
D	Itgb1	Itgb3	Itgb5	Itgb6	Itgb8	Jun	Lox	Ltbp1	Mmp13	Mmp14	Mmp1	Mmp2
E	Mmp3	Mmp8	Mmp9	Myc	Nfkb1	Pdgfra	Pdgfb	Plat	Plau	Plg	Serpina1	Serpine1
F	Serpinh1	Smad2	Smad3	Smad4	Smad6	Smad7	Snai1	Sp1	Stat1	Stat6	Tgfb1	Tgfb2
G	Tgfb3	Tgfb1	Tgfb2	Tgfb1	Thbs1	Thbs2	Timp1	Timp2	Timp3	Timp4	LOC1036943 80	Vegfa
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	SBR1176923	ENSRNOT00000083468.1	Acta2	ENSRNOG0000058039	actin, alpha 2, smooth muscle, aorta Source RGD Symbol Acc 621676
A02	SBR1195605	ENSRNOT00000024917.4	Agt	ENSRNOG0000018445	angiotensinogen Source RGD Symbol Acc 2069
A03	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A04	SBR1170984	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A05	SBR1093977	ENSRNOT00000084990.1	Bmp7	ENSRNOG0000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A06	SBR1108638	ENSRNOT00000078250.1	Cav1	ENSRNOG0000056836	caveolin 1 Source RGD Symbol Acc 2280
A07	SBR1164698	ENSRNOT00000009756.5	Ccl11	ENSRNOG0000007335	C-C motif chemokine ligand 11 Source RGD Symbol Acc 3644
A08	SBR1129555	ENSRNOT00000031626.5	Ccl12	ENSRNOG0000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
A09	SBR1146662	ENSRNOT00000015139.3	Ccl3	ENSRNOG0000011205	C-C motif chemokine ligand 3 Source RGD Symbol Acc 3647
A10	SBR1211640	ENSRNOT00000014163.7	Ccr7	ENSRNOG0000010665	C-C motif chemokine receptor 7 Source RGD Symbol Acc 735151
A11	SBR1114232	ENSRNOT00000083876.1	Cebpb	ENSRNOG0000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
A12	SBR1097834	ENSRNOT00000089292.1	Col1a2	ENSRNOG0000011292	collagen type I alpha 2 chain Source RGD Symbol Acc 621351
B01	SBR1150486	ENSRNOT00000004956.4	Col3a1	ENSRNOG0000003357	collagen type III alpha 1 chain Source RGD Symbol Acc 71029
B02	SBR1133606	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
B03	SBR1129817	ENSRNOT00000005143.6	Cxcr4	ENSRNOG0000003866	C-X-C motif chemokine receptor 4 Source RGD Symbol Acc 620465
B04	SBR1126160	ENSRNOT00000006070.6	Dcn	ENSRNOG0000004554	decorin Source RGD Symbol Acc 61895
B05	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
B06	SBR1200927	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
B07	SBR1127868	ENSRNOT00000074562.3	Eng	ENSRNOG0000050190	endoglin Source RGD Symbol Acc 1593188
B08	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
B09	SBR1204904	ENSRNOT00000037895.3	Grem1	ENSRNOG0000026053	gremlin 1, DAN family BMP antagonist Source RGD Symbol Acc 2359
B10	SBR1147127	ENSRNOT00000009763.5	Hgf	ENSRNOG0000007027	hepatocyte growth factor Source RGD Symbol Acc 2794
B11	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
B12	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
C01	SBR1178777	ENSRNOT00000010121.2	Il13	ENSRNOG0000007652	interleukin 13 Source RGD Symbol Acc 68949
C02	SBR1131164	ENSRNOT00000084465.1	Il13ra2	ENSRNOG0000032973	interleukin 13 receptor subunit alpha 2 Source RGD Symbol Acc 620838
C03	SBR1106125	ENSRNOT00000006113.8	Il1a	ENSRNOG0000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
C04	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
C05	SBR1101847	ENSRNOT00000010029.3	Il4	ENSRNOG0000007624	interleukin 4 Source RGD Symbol Acc 2898
C06	SBR1179555	ENSRNOT00000010729.4	Il5	ENSRNOG0000008111	interleukin 5 Source RGD Symbol Acc 2900
C07	SBR1108626	ENSRNOT00000025906.4	Ilk	ENSRNOG0000018993	integrin-linked kinase Source RGD Symbol Acc 620063
C08	SBR1184938	ENSRNOT00000010106.4	Inhbe	ENSRNOG0000007601	inhibin subunit beta E Source RGD Symbol Acc 621196
C09	SBR1162885	ENSRNOT00000086114.1	Itga1	ENSRNOG0000053550	integrin subunit alpha 1 Source RGD Symbol Acc 2923
C10	SBR1203459	ENSRNOT00000077401.1	Itga2	ENSRNOG0000058111	integrin subunit alpha 2 Source RGD Symbol Acc 621632
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1140121	035894.7	Itga3	000004276	integrin subunit alpha 3 Source RGD Symbol Acc 1310333
C12	SBR1162857	ENSRNOT00000006961.7	Itgav	ENSRNOG0000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D01	SBR1105686	ENSRNOT00000014785.5	Itgb1	ENSRNOG0000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D02	SBR1124401	ENSRNOT00000073350.2	Itgb3	ENSRNOG0000048449	integrin subunit beta 3 Source RGD Symbol Acc 628868
D03	SBR1156192	ENSRNOT00000076955.2	Itgb5	ENSRNOG0000001795	integrin subunit beta 5 Source RGD Symbol Acc 628869
D04	SBR1162472	ENSRNOT00000086576.1	Itgb6	ENSRNOG0000008346	integrin subunit beta 6 Source RGD Symbol Acc 1303119
D05	SBR1137977	ENSRNOT00000066545.1	Itgb8	ENSRNOG0000006569	integrin subunit beta 8 Source RGD Symbol Acc 1311374
D06	SBR1133226	ENSRNOT00000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D07	SBR1129018	ENSRNOT00000019844.6	Lox	ENSRNOG0000014426	lysyl oxidase Source RGD Symbol Acc 3015
D08	SBR1138509	ENSRNOT00000047674.4	Ltbp1	ENSRNOG00000033090	latent transforming growth factor beta binding protein 1 Source RGD Symbol Acc 68379
D09	SBR1185175	ENSRNOT00000011507.5	Mmp13	ENSRNOG0000008478	matrix metalloproteinase 13 Source RGD Symbol Acc 620196
D10	SBR1119832	ENSRNOT00000075610.2	Mmp14	ENSRNOG0000010947	matrix metalloproteinase 14 Source RGD Symbol Acc 620198
D11	SBR1179779	ENSRNOT00000012595.3	Mmp1	ENSRNOG00000032353	matrix metalloproteinase 1 Source RGD Symbol Acc 1307917
D12	SBR1120605	ENSRNOT00000022679.6	Mmp2	ENSRNOG0000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E01	SBR1166091	ENSRNOT00000091704.1	Mmp3	ENSRNOG00000032626	matrix metalloproteinase 3 Source RGD Symbol Acc 621317
E02	SBR1151242	ENSRNOT00000013936.3	Mmp8	ENSRNOG0000009907	matrix metalloproteinase 8 Source RGD Symbol Acc 631408
E03	SBR1206750	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
E04	SBR1106364	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
E05	SBR1111134	ENSRNOT00000036838.4	Nfkb1	ENSRNOG0000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E06	SBR1210315	ENSRNOT00000042117.6	Pdgfa	ENSRNOG0000001312	platelet derived growth factor subunit A Source RGD Symbol Acc 3282
E07	SBR1132695	ENSRNOT00000023196.5	Pdgfb	ENSRNOG0000017197	platelet derived growth factor subunit B Source RGD Symbol Acc 3283
E08	SBR1162717	ENSRNOT00000025763.6	Plat	ENSRNOG0000019018	plasminogen activator, tissue type Source RGD Symbol Acc 3342
E09	SBR1186883	ENSRNOT00000014273.5	Plau	ENSRNOG0000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
E10	SBR1165120	ENSRNOT00000080352.1	Plg	ENSRNOG0000017223	plasminogen Source RGD Symbol Acc 619893
E11	SBR1115437	ENSRNOT00000012577.6	Serpina1	ENSRNOG00000032669	serpin family A member 1 Source RGD Symbol Acc 3326
E12	SBR1126485	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F01	SBR1138731	ENSRNOT00000022983.6	Serpinh1	ENSRNOG0000016831	serpin family H member 1 Source RGD Symbol Acc 69302
F02	SBR1164397	ENSRNOT00000046847.4	Smad2	ENSRNOG0000018140	SMAD family member 2 Source RGD Symbol Acc 3031
F03	SBR1096995	ENSRNOT00000039730.4	Smad3	ENSRNOG0000008620	SMAD family member 3 Source RGD Symbol Acc 3032
F04	SBR1183988	ENSRNOT00000090198.1	Smad4	ENSRNOG0000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F05	SBR1208370	ENSRNOT00000012155.7	Smad6	ENSRNOG0000009173	SMAD family member 6 Source RGD Symbol Acc 1305069
F06	SBR1125360	ENSRNOT00000024831.4	Smad7	ENSRNOG0000018359	SMAD family member 7 Source RGD Symbol Acc 69314
F07	SBR1162553	ENSRNOT00000077581.1	Snai1	ENSRNOG0000009594	snail family transcriptional repressor 1 Source RGD Symbol Acc 620758
F08	SBR1200819	ENSRNOT00000019403.6	Sp1	ENSRNOG0000014084	Sp1 transcription factor Source RGD Symbol Acc 3738
F09	SBR1199428	ENSRNOT00000080522.1	Stat1	ENSRNOG0000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
F10	SBR1207811	ENSRNOT00000085350.1	Stat6	ENSRNOG0000025023	signal transducer and activator of transcription 6 Source RGD Symbol Acc 1309063

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
F12	SBR1164140	ENSRNOT00000087023.1	Tgfb2	ENSRNOG0000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G01	SBR1115193	ENSRNOT00000013516.5	Tgfb3	ENSRNOG0000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G02	SBR1139104	ENSRNOT00000081090.1	Tgfb1r	ENSRNOG0000007036	transforming growth factor, beta receptor 1 Source RGD Symbol Acc 3852
G03	SBR1102376	ENSRNOT00000037883.4	Tgfb1r2	ENSRNOG0000013265	transforming growth factor, beta receptor 2 Source RGD Symbol Acc 69651
G04	SBR1164047	ENSRNOT00000021534.6	Tgif1	ENSRNOG0000015906	TGFB-induced factor homeobox 1 Source RGD Symbol Acc 1310517
G05	SBR1160692	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G06	SBR1212280	ENSRNOT00000014552.7	Thbs2	ENSRNOG0000010529	thrombospondin 2 Source RGD Symbol Acc 1310979
G07	SBR1154276	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G08	SBR1123842	ENSRNOT00000004290.4	Timp2	ENSRNOG0000003148	TIMP metalloproteinase inhibitor 2 Source RGD Symbol Acc 61312
G09	SBR1140756	ENSRNOT00000005746.5	Timp3	ENSRNOG0000004303	TIMP metalloproteinase inhibitor 3 Source RGD Symbol Acc 3865
G10	SBR1100003	ENSRNOT00000010748.3	Timp4	ENSRNOG0000007955	TIMP metalloproteinase inhibitor 4 Source RGD Symbol Acc 69077
G11	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G12	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
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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