

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

Rat Angiogenesis

Cat. no. 249950 SBRN-024ZR

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	Akt1	Ang2	Angpt1	Angptf2	Anpep	AABR0705842 2.1	Ccl2	Cdh5	Col18a1	Col4a3	Ccr2	Cxcl1
B	Cxcl2	Cxcl9	Edn1	Efnf1	Egf	Eng	Epas1	Erb2	F2	F3	Fgf1	Fgf2
C	Fgf6	Fgf3	Vegfa	Fit1	Fn1	Hgf	Hif1a	Id1	Ifna5	Ifnb1	Ifng	Igf1
D	Il1b	Il6	Ilga5	Ilga6	Ilgb3	Jag1	Kdr	Cnmd	Lep	Mapk14	Mdk	Mmp14
E	Mmp19	Mmp2	Mmp3	Mmp9	Nos3	Nrp1	Nrp2	Pdgfra	Pdgfb	Pdgfra	Pgf	Plau
F	Plg	Plga1	Plk2	S1pr1	Serpina5	Serpine1	Serpina1	Sphk1	Tek	Tgfa	Tgfb1	Tgfb2
G	Tgfb3	Tgfb1	Thbs1	Tie1	Timp1	Timp2	Timp3	LOC1036943 80	Tymp	Vegfa	Vegfb	Vegfc
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	SBR1163078	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A02	SBR1106086	ENSRNOT00000032536.4	Ang2	ENSRNOG0000025562	angiogenin, ribonuclease A family, member 2 Source RGD Symbol Acc 1359373
A03	SBR1097173	ENSRNOT00000007979.6	Angpt1	ENSRNOG0000005854	angiopoietin 1 Source RGD Symbol Acc 628896
A04	SBR1190070	ENSRNOT00000022774.6	Angpt2	ENSRNOG0000016696	angiopoietin 2 Source RGD Symbol Acc 621861
A05	SBR1171054	ENSRNOT00000092125.1	Anpep	ENSRNOG0000014610	alanyl aminopeptidase, membrane Source RGD Symbol Acc 2991
A06	SBR1140819	ENSRNOT00000076127.2	AABR07058422.1	ENSRNOG0000029450	
A07	SBR1165601	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
A08	SBR1122090	ENSRNOT00000017983.6	Cdh5	ENSRNOG0000013324	cadherin 5 Source RGD Symbol Acc 1307370
A09	SBR1183732	ENSRNOT00000045315.4	Col18a1	ENSRNOG0000001229	collagen type XVIII alpha 1 chain Source RGD Symbol Acc 70936
A10	SBR1147922	ENSRNOT00000020669.5	Col4a3	ENSRNOG0000015365	collagen type IV alpha 3 chain Source RGD Symbol Acc 71085
A11	SBR1133606	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
A12	SBR1198580	ENSRNOT00000003778.3	Cxcl1	ENSRNOG0000002802	C-X-C motif chemokine ligand 1 Source RGD Symbol Acc 619869
B01	SBR1132150	ENSRNOT00000003745.6	Cxcl2	ENSRNOG0000002792	C-X-C motif chemokine ligand 2 Source RGD Symbol Acc 70069
B02	SBR1174753	ENSRNOT00000003082.7	Cxcl9	ENSRNOG0000002242	C-X-C motif chemokine ligand 9 Source RGD Symbol Acc 628798
B03	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
B04	SBR1168723	ENSRNOT00000027920.5	Efna1	ENSRNOG0000020573	ephrin A1 Source RGD Symbol Acc 620388
B05	SBR1200927	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
B06	SBR1127868	ENSRNOT00000074562.3	Eng	ENSRNOG0000050190	endoglin Source RGD Symbol Acc 1593188
B07	SBR1163908	ENSRNOT00000080507.1	Epas1	ENSRNOG00000021318	endothelial PAS domain protein 1 Source RGD Symbol Acc 68404
B08	SBR1175639	ENSRNOT00000049070.3	ErbB2	ENSRNOG0000006450	erb-b2 receptor tyrosine kinase 2 Source RGD Symbol Acc 2561
B09	SBR1146218	ENSRNOT00000022233.5	F2	ENSRNOG0000016325	coagulation factor II Source RGD Symbol Acc 61996
B10	SBR1148832	ENSRNOT00000015836.5	F3	ENSRNOG0000011800	coagulation factor III, tissue factor Source RGD Symbol Acc 2587
B11	SBR1111274	ENSRNOT00000087408.1	Fgf1	ENSRNOG0000013867	fibroblast growth factor 1 Source RGD Symbol Acc 2605
B12	SBR1185708	ENSRNOT00000023388.5	Fgf2	ENSRNOG0000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C01	SBR1103141	ENSRNOT00000081426.1	Fgf6	ENSRNOG0000053662	fibroblast growth factor 6 Source RGD Symbol Acc 620130
C02	SBR1145608	ENSRNOT00000080695.1	Fgfr3	ENSRNOG0000016818	fibroblast growth factor receptor 3 Source RGD Symbol Acc 620714
C03	SBR1202124	ENSRNOT00000068601.2	Vegfd	ENSRNOG0000003587	vascular endothelial growth factor D Source RGD Symbol Acc 620695
C04	SBR1197248	ENSRNOT00000001248.3	Fli1	ENSRNOG0000000940	FMS-related tyrosine kinase 1 Source RGD Symbol Acc 2621
C05	SBR1178912	ENSRNOT00000019772.6	Fn1	ENSRNOG0000014288	fibronectin 1 Source RGD Symbol Acc 2624
C06	SBR1147127	ENSRNOT00000009763.5	Hgf	ENSRNOG0000007027	hepatocyte growth factor Source RGD Symbol Acc 2794
C07	SBR1184753	ENSRNOT00000077935.1	Hif1a	ENSRNOG0000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
C08	SBR1135399	ENSRNOT00000029660.5	Id1	ENSRNOG0000021750	inhibitor of DNA binding 1, HLH protein Source RGD Symbol Acc 2858
C09	SBR1208793	ENSRNOT00000049705.1	Ifna5	ENSRNOG0000031046	interferon, alpha 5 Source RGD Symbol Acc 1359312
C10	SBR1104910	ENSRNOT00000008224.2	Ifnb1	ENSRNOG0000006268	interferon beta 1 Source RGD Symbol Acc 2865
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1108917	009919.2	Ifng	000007468	interferon gamma Source RGD Symbol Acc 2866
C12	SBR1185495	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D01	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D02	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
D03	SBR1211134	ENSRNOT00000087748.1	Itga5	ENSRNOG00000057451	integrin subunit alpha 5 Source RGD Symbol Acc 2925
D04	SBR1162857	ENSRNOT00000006961.7	Itgav	ENSRNOG0000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D05	SBR1124401	ENSRNOT00000073350.2	Itgb3	ENSRNOG0000048449	integrin subunit beta 3 Source RGD Symbol Acc 628868
D06	SBR1173778	ENSRNOT00000010638.7	Jag1	ENSRNOG0000007443	jagged 1 Source RGD Symbol Acc 2937
D07	SBR1173378	ENSRNOT00000071405.2	Kdr	ENSRNOG0000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
D08	SBR1192671	ENSRNOT00000017400.3	Cnmd	ENSRNOG0000012821	chondromodulin Source RGD Symbol Acc 620176
D09	SBR1209536	ENSRNOT00000071926.1	Lep	ENSRNOG0000045797	leptin Source RGD Symbol Acc 3000
D10	SBR1149566	ENSRNOT00000000618.6	Mapk14	ENSRNOG0000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D11	SBR1178481	ENSRNOT00000033978.3	Mdk	ENSRNOG0000017560	midkine Source RGD Symbol Acc 69073
D12	SBR1119832	ENSRNOT00000075610.2	Mmp14	ENSRNOG0000010947	matrix metalloproteinase 14 Source RGD Symbol Acc 620198
E01	SBR1205317	ENSRNOT00000008909.7	Mmp19	ENSRNOG0000006778	matrix metalloproteinase 19 Source RGD Symbol Acc 1311376
E02	SBR1120605	ENSRNOT00000022679.6	Mmp2	ENSRNOG0000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E03	SBR1166091	ENSRNOT00000091704.1	Mmp3	ENSRNOG0000032626	matrix metalloproteinase 3 Source RGD Symbol Acc 621317
E04	SBR1206750	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metalloproteinase 9 Source RGD Symbol Acc 621320
E05	SBR1203756	ENSRNOT00000013058.4	Nos3	ENSRNOG0000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E06	SBR1157725	ENSRNOT00000014492.5	Nrp1	ENSRNOG0000010744	neuropilin 1 Source RGD Symbol Acc 621588
E07	SBR1122077	ENSRNOT00000042562.3	Nrp2	ENSRNOG0000031232	neuropilin 2 Source RGD Symbol Acc 621442
E08	SBR1210315	ENSRNOT00000042117.6	Pdgfa	ENSRNOG0000001312	platelet derived growth factor subunit A Source RGD Symbol Acc 3282
E09	SBR1132695	ENSRNOT00000023196.5	Pdgfb	ENSRNOG0000017197	platelet derived growth factor subunit B Source RGD Symbol Acc 3283
E10	SBR1195557	ENSRNOT00000003077.5	Pdgfra	ENSRNOG0000002244	platelet derived growth factor receptor alpha Source RGD Symbol Acc 3284
E11	SBR1124947	ENSRNOT00000007790.5	Pgf	ENSRNOG0000005650	placental growth factor Source RGD Symbol Acc 619850
E12	SBR1186883	ENSRNOT00000014273.5	Plau	ENSRNOG0000010516	plasminogen activator, urokinase Source RGD Symbol Acc 3343
F01	SBR1165120	ENSRNOT00000080352.1	Plg	ENSRNOG0000017223	plasminogen Source RGD Symbol Acc 619893
F02	SBR1187694	ENSRNOT00000010218.5	Ptgs1	ENSRNOG0000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439
F03	SBR1118067	ENSRNOT00000079599.1	Ptk2	ENSRNOG0000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
F04	SBR1147227	ENSRNOT00000018318.3	S1pr1	ENSRNOG0000013683	sphingosine-1-phosphate receptor 1 Source RGD Symbol Acc 61958
F05	SBR1138369	ENSRNOT00000003625.7	Serpib5	ENSRNOG0000002640	serpin family B member 5 Source RGD Symbol Acc 69342
F06	SBR1126485	ENSRNOT00000001916.2	Serpine1	ENSRNOG0000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F07	SBR1135458	ENSRNOT00000004313.5	Serpinf1	ENSRNOG0000003172	serpin family F member 1 Source RGD Symbol Acc 631369
F08	SBR1204599	ENSRNOT00000032163.5	Sphk1	ENSRNOG0000010626	sphingosine kinase 1 Source RGD Symbol Acc 620048
F09	SBR1214417	ENSRNOT00000032248.3	Tek	ENSRNOG0000008587	TEK receptor tyrosine kinase Source RGD Symbol Acc 620980
F10	SBR1118717	ENSRNOT00000057441.4	Tgfa	ENSRNOG0000016182	transforming growth factor alpha Source RGD Symbol Acc 3849

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	Tgfb1	ENSRNOG0000007036	transforming growth factor, beta receptor 1 Source RGD Symbol Acc 3852
G03	SBR1160692	ENSRNOT00000083351.1	Thbs1	ENSRNOG0000045829	thrombospondin 1 Source RGD Symbol Acc 1588455
G04	SBR1144005	ENSRNOT00000093097.1	Tie1	ENSRNOG0000020173	tyrosine kinase with immunoglobulin-like and EGF-like domains 1 Source RGD Symbol Acc 621642
G05	SBR1154276	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G06	SBR1123842	ENSRNOT00000004290.4	Timp2	ENSRNOG0000003148	TIMP metalloproteinase inhibitor 2 Source RGD Symbol Acc 61312
G07	SBR1140756	ENSRNOT00000005746.5	Timp3	ENSRNOG0000004303	TIMP metalloproteinase inhibitor 3 Source RGD Symbol Acc 3865
G08	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G09	SBR1135044	ENSRNOT00000040541.4	Tymp	ENSRNOG0000032394	thymidine phosphorylase Source RGD Symbol Acc 1305756
G10	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G11	SBR1120785	ENSRNOT00000050891.3	Vegfb	ENSRNOG0000021156	vascular endothelial growth factor B Source RGD Symbol Acc 619799
G12	SBR1127903	ENSRNOT00000015529.4	Vegfc	ENSRNOG0000011416	vascular endothelial growth factor C Source RGD Symbol Acc 619800
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 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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