

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

Rat Mesenchymal Stem Cells

Cat. no. 249950 SBRN-082ZR

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	Abcb1a	Acta2	Adipoq	Alcam	Anpep	Anxa5	Bdnf	Bglap	Bmp2	Bmp4	Bmp6	Bmp7
B	Casp3	Cd44	Col1a1	Csf2	Csf3	Clnnb1	Egf	Eng	Erb2	Fgf10	Fgf2	Fut1
C	Fut4	Fzd9	Gdf15	Gdf5	Gdf6	Gdf7	Hat1	Hdac1	Hgf	Hnf1a	Icam1	Ifng
D	Igf1	Il10	Il1b	Il6	Ins2	Ilga6	Ilgav	Ilgax	Ilgb1	Jag1	Kdr	Kitlg
E	Lif	Mcam	Mif	Mmp2	Nes	Ngfr	Notch1	Nt5e	Nudt6	Pdgfra	Pigs	Pou5f1
F	Pparg	Prom1	Plk2	Ptprc	Smurf1	Rhoa	Runx2	Slc17a5	Smad4	Smurf2	Sox2	Sox9
G	Tbx5	Tert	Tgfb1	Tgfb3	Thy1	LOC1036943 80	Vcam1	Vegfa	Vim	Vwf	Wnt3a	AABR0702582 5.1
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	SBR1116067	ENSRNOT00000082359.1	Abcb1a	ENSRNOG0000008012	ATP binding cassette subfamily B member 4 Source RGD Symbol Acc 620248
A02	SBR1176923	ENSRNOT00000083468.1	Acta2	ENSRNOG0000058039	actin, alpha 2, smooth muscle, aorta Source RGD Symbol Acc 621676
A03	SBR1209814	ENSRNOT00000002492.5	Adipoq	ENSRNOG0000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A04	SBR1178716	ENSRNOT00000002738.5	Alcam	ENSRNOG0000001989	activated leukocyte cell adhesion molecule Source RGD Symbol Acc 619972
A05	SBR1171054	ENSRNOT00000092125.1	Anpep	ENSRNOG0000014610	alanyl aminopeptidase, membrane Source RGD Symbol Acc 2991
A06	SBR1096992	ENSRNOT00000019554.6	Anxa5	ENSRNOG0000014453	annexin A5 Source RGD Symbol Acc 2120
A07	SBR1172593	ENSRNOT00000083542.1	Bdnf	ENSRNOG0000047466	brain-derived neurotrophic factor Source RGD Symbol Acc 2202
A08	SBR1199255	ENSRNOT00000026530.3	Bglap	ENSRNOG0000019607	bone gamma-carboxylglutamate protein Source RGD Symbol Acc 2206
A09	SBR1127251	ENSRNOT00000028904.4	Bmp2	ENSRNOG0000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
A10	SBR1132271	ENSRNOT00000012957.6	Bmp4	ENSRNOG0000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A11	SBR1213989	ENSRNOT00000018359.7	Bmp6	ENSRNOG0000013717	bone morphogenetic protein 6 Source RGD Symbol Acc 2214
A12	SBR1093977	ENSRNOT00000084990.1	Bmp7	ENSRNOG0000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
B01	SBR1123217	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B02	SBR1148883	ENSRNOT00000009000.7	Cd44	ENSRNOG0000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
B03	SBR1113220	ENSRNOT00000005311.6	Col1a1	ENSRNOG0000003897	collagen type I alpha 1 chain Source RGD Symbol Acc 61817
B04	SBR1136894	ENSRNOT00000032333.3	Csf2	ENSRNOG0000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B05	SBR1124341	ENSRNOT00000011509.3	Csf3	ENSRNOG0000008525	colony stimulating factor 3 Source RGD Symbol Acc 2426
B06	SBR1143136	ENSRNOT00000079085.1	Cttnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
B07	SBR1200927	ENSRNOT00000087007.1	Egf	ENSRNOG0000053979	epidermal growth factor Source RGD Symbol Acc 2542
B08	SBR1127868	ENSRNOT00000074562.3	Eng	ENSRNOG0000050190	endoglin Source RGD Symbol Acc 1593188
B09	SBR1175639	ENSRNOT00000049070.3	ErbB2	ENSRNOG0000006450	erb-b2 receptor tyrosine kinase 2 Source RGD Symbol Acc 2561
B10	SBR1145306	ENSRNOT00000016485.3	Fgf10	ENSRNOG0000012278	fibroblast growth factor 10 Source RGD Symbol Acc 2606
B11	SBR1185708	ENSRNOT00000023388.5	Fgf2	ENSRNOG0000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
B12	SBR1175602	ENSRNOT00000028494.3	Fut1	ENSRNOG0000020995	fucosyltransferase 1 Source RGD Symbol Acc 2638
C01	SBR1193692	ENSRNOT00000012176.3	Fut4	ENSRNOG0000009157	fucosyltransferase 4 Source RGD Symbol Acc 619954
C02	SBR1126677	ENSRNOT00000001973.3	Fzd9	ENSRNOG0000001452	frizzled class receptor 9 Source RGD Symbol Acc 628817
C03	SBR1178933	ENSRNOT00000026652.3	Gdf15	ENSRNOG0000019661	growth differentiation factor 15 Source RGD Symbol Acc 2674
C04	SBR1201122	ENSRNOT00000071099.1	Gdf5	ENSRNOG0000050123	growth differentiation factor 5 Source RGD Symbol Acc 620102
C05	SBR1157438	ENSRNOT00000010266.5	Gdf6	ENSRNOG0000007810	growth differentiation factor 6 Source RGD Symbol Acc 620104
C06	SBR1113320	ENSRNOT00000007928.5	Gdf7	ENSRNOG0000006046	growth differentiation factor 7 Source RGD Symbol Acc 620105
C07	SBR1198969	ENSRNOT00000002085.6	Hat1	ENSRNOG0000001524	histone acetyltransferase 1 Source RGD Symbol Acc 1305716
C08	SBR1151584	ENSRNOT00000012854.6	Hdac1	ENSRNOG0000009568	histone deacetylase 1 Source RGD Symbol Acc 1309799
C09	SBR1147127	ENSRNOT00000009763.5	Hgf	ENSRNOG0000007027	hepatocyte growth factor Source RGD Symbol Acc 2794
C10	SBR1159772	ENSRNOT00000001565.3	Hnf1a	ENSRNOG0000001183	HNF1 homeobox A Source RGD Symbol Acc 3828
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1152534	028066.5	Icam1	000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
C12	SBR1108917	ENSRNOT0000009919.2	Iifng	ENSRNOG0000007468	interferon gamma Source RGD Symbol Acc 2866
D01	SBR1185495	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
D02	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D03	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG0000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D04	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
D05	SBR1158339	ENSRNOT00000027656.3	Ins2	ENSRNOG0000020405	insulin 2 Source RGD Symbol Acc 2916
D06	SBR1106472	ENSRNOT00000002075.4	Itga6	ENSRNOG0000001518	integrin subunit alpha 6 Source RGD Symbol Acc 621633
D07	SBR1162857	ENSRNOT00000006961.7	Itgav	ENSRNOG0000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D08	SBR1156619	ENSRNOT00000054983.4	Itgax	ENSRNOG0000036703	integrin subunit alpha X Source RGD Symbol Acc 1561123
D09	SBR1105686	ENSRNOT00000014785.5	Itgb1	ENSRNOG0000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
D10	SBR1173778	ENSRNOT00000010638.7	Jag1	ENSRNOG0000007443	jagged 1 Source RGD Symbol Acc 2937
D11	SBR1173378	ENSRNOT00000071405.2	Kdr	ENSRNOG0000046829	kinase insert domain receptor Source RGD Symbol Acc 2965
D12	SBR1164095	ENSRNOT00000085097.1	Kitlg	ENSRNOG0000005386	KIT ligand Source RGD Symbol Acc 3086
E01	SBR1155933	ENSRNOT00000009313.4	Lif	ENSRNOG0000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
E02	SBR1125081	ENSRNOT00000090780.1	Mcam	ENSRNOG0000007726	melanoma cell adhesion molecule Source RGD Symbol Acc 620463
E03	SBR1115783	ENSRNOT00000083127.1	Miff	ENSRNOG0000008658	melanocyte inducing transcription factor Source RGD Symbol Acc 3092
E04	SBR1120605	ENSRNOT00000022679.6	Mmp2	ENSRNOG0000016695	matrix metalloproteinase 2 Source RGD Symbol Acc 621316
E05	SBR1154824	ENSRNOT00000025314.3	Nes	ENSRNOG0000018681	nestin Source RGD Symbol Acc 3162
E06	SBR1176511	ENSRNOT00000007268.3	Ngfr	ENSRNOG0000005392	nerve growth factor receptor Source RGD Symbol Acc 3177
E07	SBR1183596	ENSRNOT00000026212.7	Notch1	ENSRNOG0000019322	notch 1 Source RGD Symbol Acc 3187
E08	SBR1182246	ENSRNOT00000015057.6	Nt5e	ENSRNOG0000011071	5 nucleotidase, ecto Source RGD Symbol Acc 61956
E09	SBR1197045	ENSRNOT00000023437.6	Nudt6	ENSRNOG0000017420	nudix hydrolase 6 Source RGD Symbol Acc 621356
E10	SBR1100630	ENSRNOT00000086033.1	Pdgfrb	ENSRNOG0000018461	platelet derived growth factor receptor beta Source RGD Symbol Acc 3285
E11	SBR1207946	ENSRNOT00000015207.5	Pigs	ENSRNOG0000011366	phosphatidylinositol glycan anchor biosynthesis, class S Source RGD Symbol Acc 1359436
E12	SBR1115832	ENSRNOT00000072288.2	Pou5f1	ENSRNOG0000046487	POU class 5 homeobox 1 Source RGD Symbol Acc 1359491
F01	SBR1131520	ENSRNOT00000082969.1	Pparg	ENSRNOG0000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F02	SBR1150795	ENSRNOT00000004231.6	Prom1	ENSRNOG0000003098	prominin 1 Source RGD Symbol Acc 69367
F03	SBR1118067	ENSRNOT00000079599.1	Ptk2	ENSRNOG0000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
F04	SBR1159554	ENSRNOT00000064785.3	Ptprc	ENSRNOG0000000655	protein tyrosine phosphatase, receptor type, C Source RGD Symbol Acc 3451
F05	SBR1103926	ENSRNOT00000082989.1	Smurf1	ENSRNOG0000000999	SMAD specific E3 ubiquitin protein ligase 1 Source RGD Symbol Acc 1594738
F06	SBR1125110	ENSRNOT00000071664.2	Rhoa	ENSRNOG0000005019	ras homolog family member A Source RGD Symbol Acc 619921
F07	SBR1103643	ENSRNOT00000061014.4	Runx2	ENSRNOG0000020193	runt-related transcription factor 2 Source RGD Symbol Acc 2282
F08	SBR1173418	ENSRNOT00000012474.6	Slc17a5	ENSRNOG0000009330	solute carrier family 17 member 5 Source RGD Symbol Acc 1311388
F09	SBR1183988	ENSRNOT00000090198.1	Smad4	ENSRNOG0000051965	SMAD family member 4 Source RGD Symbol Acc 3033
F10	SBR1108511	ENSRNOT00000019781.6	Smurf2	ENSRNOG0000014623	SMAD specific E3 ubiquitin protein ligase 2 Source RGD Symbol Acc 1310067

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1125680	ENSRNOT00000016236.3	Sox2	ENSRNOG00000012199	SRY box 2 Source RGD Symbol Acc 1565646
F12	SBR1186301	ENSRNOT00000003511.6	Sox9	ENSRNOG0000002607	SRY box 9 Source RGD Symbol Acc 620474
G01	SBR1139642	ENSRNOT00000001893.5	Tbx5	ENSRNOG0000001399	T-box 5 Source RGD Symbol Acc 1305702
G02	SBR1196369	ENSRNOT00000022683.4	Tert	ENSRNOG0000025327	telomerase reverse transcriptase Source RGD Symbol Acc 70494
G03	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G04	SBR1115193	ENSRNOT00000013516.5	Tgfb3	ENSRNOG0000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
G05	SBR1134727	ENSRNOT00000008685.3	Thy1	ENSRNOG0000006604	Thy-1 cell surface antigen Source RGD Symbol Acc 3860
G06	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G07	SBR1189462	ENSRNOT00000077972.1	Vcam1	ENSRNOG0000014333	vascular cell adhesion molecule 1 Source RGD Symbol Acc 3952
G08	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG0000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
G09	SBR1197523	ENSRNOT00000024430.5	Vim	ENSRNOG0000018087	vimentin Source RGD Symbol Acc 621646
G10	SBR1124386	ENSRNOT00000026643.7	Vwf	ENSRNOG0000019689	von Willebrand factor Source RGD Symbol Acc 621759
G11	SBR1178408	ENSRNOT00000064505.3	Wnt3a	ENSRNOG0000003039	Wnt family member 3A Source RGD Symbol Acc 1308057
G12	SBR1146881	ENSRNOT00000048104.4	AABR07025825.1	ENSRNOG0000032977	
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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