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

Rat Hypertension

Cat. no. 249950 SBRN-037ZR

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	Ace	Ace2	Acta2	Adm	Adra1b	Adra1d	Adrb1	Agt	Agtr1a	Agtr1b	Agtr2	Alox5
B	Arg2	Atp2c1	Atp6ap2	Avp	Avpr1a	LOC100909648	Bdkrb1	Bdkrb2	Bmpr2	Cacna1c	Calca	Cav1
C	Chrna1	Chrnb1	Clic1	Clic4	Clic5	Cnga1	LOC108348053	Cnga3	Cnga4	Cngb1	Cps1	Drd3
D	Drd5	Ece1	Edn1	Edn2	Ednra	Ednrb	Ephx2	Gch1	Gchfr	Gucy1a1	Gucy1b1	Hif1a
E	Itpr1	Itpr2	Itpr3	Kcnj8	Kcnma1	Mylk	Mylk2	Mylk3	Nos3	Nosip	Nostrin	Nppb
F	Nppc	Npr1	Npy1r	P2rx4	Pde3a	Pde3b	Pde5a	Plcg1	Plcg2	AABR07006727.1	Prkg2	Ptgir
G	Ptgs1	Ptgs2	Ren	S1pr1	Scnn1a	Scnn1b	Scnn1g	Slc7a1	Sphk1	Sphk2	Uts2	Uts2r
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	SBR1133139	ENSRNOT00000010627.8	Ace	ENSRNOG00000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A02	SBR1168830	ENSRNOT00000080730.1	Ace2	ENSRNOG00000031665	angiotensin I converting enzyme 2 Source RGD Symbol Acc 728890
A03	SBR1176923	ENSRNOT00000083468.1	Acta2	ENSRNOG00000058039	actin, alpha 2, smooth muscle, aorta Source RGD Symbol Acc 621676
A04	SBR1135593	ENSRNOT00000036718.1	Adm	ENSRNOG00000027030	adrenomedullin Source RGD Symbol Acc 2047
A05	SBR1213334	ENSRNOT00000087937.1	Adra1b	ENSRNOG00000060087	adrenoceptor alpha 1B Source RGD Symbol Acc 2054
A06	SBR1115374	ENSRNOT00000028877.2	Adra1d	ENSRNOG00000021256	adrenoceptor alpha 1D Source RGD Symbol Acc 62064
A07	SBR1141749	ENSRNOT00000022813.2	Adrb1	ENSRNOG00000017002	adrenoceptor beta 1 Source RGD Symbol Acc 2059
A08	SBR1195605	ENSRNOT00000024917.4	Agt	ENSRNOG00000018445	angiotensinogen Source RGD Symbol Acc 2069
A09	SBR1140853	ENSRNOT00000038532.3	Agtr1a	ENSRNOG00000018346	angiotensin II receptor, type 1a Source RGD Symbol Acc 2070
A10	SBR1131175	ENSRNOT00000014178.4	Agtr1b	ENSRNOG00000010640	angiotensin II receptor, type 1b Source RGD Symbol Acc 2071
A11	SBR1169523	ENSRNOT00000074269.1	Agtr2	ENSRNOG00000050006	angiotensin II receptor, type 2 Source RGD Symbol Acc 2072
A12	SBR1113879	ENSRNOT00000017633.5	Alox5	ENSRNOG00000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
B01	SBR1136389	ENSRNOT00000083433.1	Arg2	ENSRNOG00000053811	arginase 2 Source RGD Symbol Acc 2151
B02	SBR1106383	ENSRNOT00000018175.8	Atp2c1	ENSRNOG00000013305	ATPase secretory pathway Ca2+ transporting 1 Source RGD Symbol Acc 621311
B03	SBR1129972	ENSRNOT00000005138.6	Atp6ap2	ENSRNOG00000003858	ATPase H+ transporting accessory protein 2 Source RGD Symbol Acc 1561269
B04	SBR1112106	ENSRNOT00000028833.5	Avp	ENSRNOG00000021229	arginine vasopressin Source RGD Symbol Acc 2184
B05	SBR1183281	ENSRNOT00000005829.5	Avpr1a	ENSRNOG00000004400	arginine vasopressin receptor 1A Source RGD Symbol Acc 2185
B06	SBR1193701	ENSRNOT00000074512.2	LOC100909648	ENSRNOG00000048522	arginine vasopressin receptor 1B Source RGD Symbol Acc 61886
B07	SBR1146463	ENSRNOT00000005953.3	Bdkrb1	ENSRNOG00000004488	bradykinin receptor B1 Source RGD Symbol Acc 620401
B08	SBR1147941	ENSRNOT00000071735.2	Bdkrb2	ENSRNOG00000047300	bradykinin receptor B2 Source RGD Symbol Acc 2201
B09	SBR1206505	ENSRNOT00000035238.4	Bmpr2	ENSRNOG00000022196	bone morphogenetic protein receptor type 2 Source RGD Symbol Acc 71082
B10	SBR1202754	ENSRNOT00000052017.6	Cacna1c	ENSRNOG00000007090	calcium voltage-gated channel subunit alpha1 C Source RGD Symbol Acc 2245
B11	SBR1193989	ENSRNOT00000055124.4	Calca	ENSRNOG00000011130	calcitonin-related polypeptide alpha Source RGD Symbol Acc 2254
B12	SBR1108638	ENSRNOT00000078250.1	Cav1	ENSRNOG00000056836	caveolin 1 Source RGD Symbol Acc 2280
C01	SBR1172409	ENSRNOT00000024706.4	Chrna1	ENSRNOG00000018286	cholinergic receptor nicotinic alpha 1 subunit Source RGD Symbol Acc 69277
C02	SBR1102103	ENSRNOT00000019947.3	Chrnb1	ENSRNOG00000014698	cholinergic receptor nicotinic beta 1 subunit Source RGD Symbol Acc 2349
C03	SBR1166834	ENSRNOT00000068435.3	Clic1	ENSRNOG00000029682	chloride intracellular channel 1 Source RGD Symbol Acc 1303043
C04	SBR1193458	ENSRNOT00000024464.4	Clic4	ENSRNOG00000018109	chloride intracellular channel 4 Source RGD Symbol Acc 61857
C05	SBR1147435	ENSRNOT00000073667.2	Clic5	ENSRNOG00000047218	chloride intracellular channel 5 Source RGD Symbol Acc 620659
C06	SBR1122585	ENSRNOT00000006469.4	Cnga1	ENSRNOG00000004778	cyclic nucleotide gated channel alpha 1 Source RGD Symbol Acc 621815
C07	SBR1200464	ENSRNOT00000092950.1	LOC108348053	ENSRNOG00000030119	cyclic nucleotide-gated olfactory channel Source RGD Symbol Acc 11381814
C08	SBR1203565	ENSRNOT00000085720.1	Cnga3	ENSRNOG00000051950	cyclic nucleotide gated channel alpha 3 Source RGD Symbol Acc 70948
C09	SBR1162297	ENSRNOT00000023751.7	Cnga4	ENSRNOG00000017609	cyclic nucleotide gated channel alpha 4 Source RGD Symbol Acc 619844
C10	SBR1133543	ENSRNOT00000060351.3	Cngb1	ENSRNOG00000031773	cyclic nucleotide gated channel beta 1 Source RGD Symbol Acc 621809
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1101054	019023.5	Cps1	000013704	carbamoyl-phosphate synthase 1 Source RGD Symbol Acc 2395
C12	SBR1163929	ENSRNOT00000089057.1	Drd3	ENSRNOG00000060806	dopamine receptor D3 Source RGD Symbol Acc 2521
D01	SBR1106163	ENSRNOT00000007074.2	Drd5	ENSRNOG00000005338	dopamine receptor D5 Source RGD Symbol Acc 2523
D02	SBR1177457	ENSRNOT00000077742.1	Ece1	ENSRNOG00000014241	endothelin converting enzyme 1 Source RGD Symbol Acc 620293
D03	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG00000014361	endothelin 1 Source RGD Symbol Acc 2532
D04	SBR1103441	ENSRNOT00000012569.3	Edn2	ENSRNOG00000009390	endothelin 2 Source RGD Symbol Acc 2533
D05	SBR1211856	ENSRNOT00000080095.1	Ednra	ENSRNOG00000012721	endothelin receptor type A Source RGD Symbol Acc 2535
D06	SBR1108793	ENSRNOT00000014747.5	Ednrb	ENSRNOG00000010997	endothelin receptor type B Source RGD Symbol Acc 2536
D07	SBR1172349	ENSRNOT00000023385.7	Ephx2	ENSRNOG00000017286	epoxide hydrolase 2 Source RGD Symbol Acc 620732
D08	SBR1209903	ENSRNOT00000014821.7	Gch1	ENSRNOG00000011039	GTP cyclohydrolase 1 Source RGD Symbol Acc 61992
D09	SBR1148917	ENSRNOT00000016458.4	Gchfr	ENSRNOG00000012290	GTP cyclohydrolase I feedback regulator Source RGD Symbol Acc 621746
D10	SBR1205788	ENSRNOT00000017190.4	Gucy1a1	ENSRNOG00000012302	guanylate cyclase 1 soluble subunit alpha 1 Source RGD Symbol Acc 68436
D11	SBR1165217	ENSRNOT00000064930.2	Gucy1b1	ENSRNOG00000012060	guanylate cyclase 1 soluble subunit beta 1 Source RGD Symbol Acc 2769
D12	SBR1184753	ENSRNOT00000077935.1	Hif1a	ENSRNOG00000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
E01	SBR1160599	ENSRNOT00000064025.3	Itpr1	ENSRNOG00000007104	inositol 1,4,5-trisphosphate receptor, type 1 Source RGD Symbol Acc 2933
E02	SBR1157296	ENSRNOT00000040645.5	Itpr2	ENSRNOG00000001804	inositol 1,4,5-trisphosphate receptor, type 2 Source RGD Symbol Acc 69649
E03	SBR1102248	ENSRNOT00000090925.2	Itpr3	ENSRNOG00000052795	inositol 1,4,5-trisphosphate receptor, type 3 Source RGD Symbol Acc 2934
E04	SBR1162702	ENSRNOT00000018057.5	Kcnj8	ENSRNOG00000013463	potassium voltage-gated channel subfamily J member 8 Source RGD Symbol Acc 2960
E05	SBR1163295	ENSRNOT00000077671.1	Kcnma1	ENSRNOG00000005985	potassium calcium-activated channel subfamily M alpha 1 Source RGD Symbol Acc 620715
E06	SBR1114881	ENSRNOT00000085618.1	Mylk	ENSRNOG00000002215	myosin light chain kinase Source RGD Symbol Acc 1310915
E07	SBR1150149	ENSRNOT00000011255.5	Mylk2	ENSRNOG00000008235	myosin light chain kinase 2 Source RGD Symbol Acc 620934
E08	SBR1110723	ENSRNOT00000023657.6	Mylk3	ENSRNOG00000017546	myosin light chain kinase 3 Source RGD Symbol Acc 1305801
E09	SBR1203756	ENSRNOT00000013058.4	Nos3	ENSRNOG00000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E10	SBR1130626	ENSRNOT00000027882.7	Nosip	ENSRNOG00000020543	nitric oxide synthase interacting protein Source RGD Symbol Acc 1309992
E11	SBR1136149	ENSRNOT00000067161.3	Nostrin	ENSRNOG00000006611	nitric oxide synthase trafficking Source RGD Symbol Acc 727920
E12	SBR1178119	ENSRNOT00000010779.5	Nppb	ENSRNOG00000008141	natriuretic peptide B Source RGD Symbol Acc 3194
F01	SBR1139716	ENSRNOT00000025582.2	Nppc	ENSRNOG00000018854	natriuretic peptide C Source RGD Symbol Acc 620850
F02	SBR1175096	ENSRNOT00000020307.3	Npr1	ENSRNOG00000014684	natriuretic peptide receptor 1 Source RGD Symbol Acc 3195
F03	SBR1137148	ENSRNOT00000018952.6	Npy1r	ENSRNOG00000014149	neuropeptide Y receptor Y1 Source RGD Symbol Acc 3198
F04	SBR1130101	ENSRNOT00000001752.5	P2rx4	ENSRNOG00000001300	purinergic receptor P2X 4 Source RGD Symbol Acc 62073
F05	SBR1105540	ENSRNOT00000032843.1	Pde3a	ENSRNOG00000025042	phosphodiesterase 3A Source RGD Symbol Acc 61942
F06	SBR1185352	ENSRNOT00000015498.4	Pde3b	ENSRNOG00000011417	phosphodiesterase 3B Source RGD Symbol Acc 61943
F07	SBR1189939	ENSRNOT00000019638.4	Pde5a	ENSRNOG00000014443	phosphodiesterase 5A Source RGD Symbol Acc 620995
F08	SBR1124010	ENSRNOT00000078909.1	Plcg1	ENSRNOG00000051490	phospholipase C, gamma 1 Source RGD Symbol Acc 3347
F09	SBR1174929	ENSRNOT00000090165.1	Plcg2	ENSRNOG00000051986	phospholipase C, gamma 2 Source RGD Symbol Acc 3348
F10	SBR1193564	ENSRNOT00000082874.1	AABR07006727.1	ENSRNOG00000052057	

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1104530	ENSRNOT00000003237.4	Prkg2	ENSRNOG00000002361	protein kinase cGMP-dependent 2 Source RGD Symbol Acc 3401
F12	SBR1211197	ENSRNOT00000022461.3	Ptgir	ENSRNOG00000016756	prostaglandin I2 receptor Source RGD Symbol Acc 1310890
G01	SBR1187694	ENSRNOT00000010218.5	Ptgs1	ENSRNOG00000007415	prostaglandin-endoperoxide synthase 1 Source RGD Symbol Acc 3439
G02	SBR1122148	ENSRNOT00000003567.4	Ptgs2	ENSRNOG00000002525	prostaglandin-endoperoxide synthase 2 Source RGD Symbol Acc 620349
G03	SBR1199111	ENSRNOT00000003951.4	Ren	ENSRNOG00000002937	renin Source RGD Symbol Acc 3554
G04	SBR1147227	ENSRNOT00000018318.3	S1pr1	ENSRNOG00000013683	sphingosine-1-phosphate receptor 1 Source RGD Symbol Acc 61958
G05	SBR1105898	ENSRNOT00000067271.1	Scnn1a	ENSRNOG00000019368	sodium channel epithelial 1 alpha subunit Source RGD Symbol Acc 3639
G06	SBR1138645	ENSRNOT00000067138.3	Scnn1b	ENSRNOG00000030981	sodium channel epithelial 1 beta subunit Source RGD Symbol Acc 3640
G07	SBR1151635	ENSRNOT00000024057.4	Scnn1g	ENSRNOG00000017842	sodium channel epithelial 1 gamma subunit Source RGD Symbol Acc 3641
G08	SBR1145326	ENSRNOT00000089804.1	Slc7a1	ENSRNOG00000000924	solute carrier family 7 member 1 Source RGD Symbol Acc 3716
G09	SBR1204599	ENSRNOT00000032163.5	Sphk1	ENSRNOG00000010626	sphingosine kinase 1 Source RGD Symbol Acc 620048
G10	SBR1172581	ENSRNOT00000028549.5	Sphk2	ENSRNOG00000021032	sphingosine kinase 2 Source RGD Symbol Acc 1307757
G11	SBR1182051	ENSRNOT00000024798.4	Uts2	ENSRNOG00000018393	urotensin 2 Source RGD Symbol Acc 3930
G12	SBR1182646	ENSRNOT00000054926.1	Uts2r	ENSRNOG00000036669	urotensin 2 receptor Source RGD Symbol Acc 621884
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	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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