

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

## Rat Glucocorticoid Signaling

Cat. no. 249950 SBRN-154ZA

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
<b>A</b>	Adarb1	Aff1	Ak2	Ampd3	Angptf4	Anxa4	Aqp1	Arid5b	Asph	Aif4	Bcl6	Bmpr
<b>B</b>	Calcr	Cebpa	Cebpb	Col4a2	Creb1	Creb3	Creb3l4	Ccn2	Cyb561	Ddit4	Diras2	Dusp1
<b>C</b>	Edn1	Ehd3	Errf1	Fkbp5	Fosl2	Gdgd1	Ghrhr	Glul	Got1	H6pd	Has2	Hnrnp1l
<b>D</b>	Il10	Il1rn	Il6	Il6r	Klf13	Klf9	Lox	Merl1	AC128848.1	M2A	Nrkbia	AABR0703175 6.1
<b>E</b>	Pdcd7	Pdgfrb	Pdp1	Per1	Per2	Pik3r1	Pid1	Plekhf1	Pou2f1	Pou2f2	Rasa3	Rgs2
<b>F</b>	Rhob	Rhoj	Sesn1	Sgk1	Slc10a6	Slc19a2	Slc22a5	Snta1	Sphk1	Spib1	Stat5a	Stat5b
<b>G</b>	Tbl1xr1	LOC1036943 80	Tp53inp1	Tsc22d3	Usp2	Usp54	Vdr	Vidr	Xdh	Zfp281	Zfp36	Zhx3
<b>H</b>	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	SBR1136212	ENSRNOT0000001642.6	Adarb1	ENSRNOG0000001227	adenosine deaminase, RNA-specific, B1 Source RGD Symbol Acc 2033
A02	SBR1101724	ENSRNOT00000086694.1	Aff1	ENSRNOG0000002232	AF4/FMR2 family, member 1 Source RGD Symbol Acc 1307940
A03	SBR1190946	ENSRNOT00000000134.4	Ak2	ENSRNOG0000000122	adenylate kinase 2 Source RGD Symbol Acc 2077
A04	SBR1141213	ENSRNOT00000024933.5	Ampd3	ENSRNOG0000018262	adenosine monophosphate deaminase 3 Source RGD Symbol Acc 2111
A05	SBR1186322	ENSRNOT00000010031.6	Angptl4	ENSRNOG0000007545	angiotensin-like 4 Source RGD Symbol Acc 735058
A06	SBR1111339	ENSRNOT00000024436.7	Anxa4	ENSRNOG0000018159	annexin A4 Source RGD Symbol Acc 621171
A07	SBR1204719	ENSRNOT00000015692.2	Aqp1	ENSRNOG0000011648	aquaporin 1 Source RGD Symbol Acc 2141
A08	SBR1115856	ENSRNOT00000076069.1	Arid5b	ENSRNOG0000000635	AT-rich interaction domain 5B Source RGD Symbol Acc 1311735
A09	SBR1161959	ENSRNOT00000077044.2	Asph	ENSRNOG0000007445	aspartate-beta-hydroxylase Source RGD Symbol Acc 1312000
A10	SBR1186510	ENSRNOT00000065304.4	Atf4	ENSRNOG0000017801	activating transcription factor 4 Source RGD Symbol Acc 621863
A11	SBR1158306	ENSRNOT00000002522.4	Bcl6	ENSRNOG0000001843	BCL6, transcription repressor Source RGD Symbol Acc 1309345
A12	SBR1178399	ENSRNOT00000033460.5	Bmper	ENSRNOG0000015357	BMP-binding endothelial regulator Source RGD Symbol Acc 1563373
B01	SBR1164468	ENSRNOT00000013937.5	Calcr	ENSRNOG0000010053	calcitonin receptor Source RGD Symbol Acc 621001
B02	SBR1144323	ENSRNOT00000014517.5	Cebpa	ENSRNOG0000010918	CCAAT/enhancer binding protein alpha Source RGD Symbol Acc 2326
B03	SBR1114232	ENSRNOT00000083876.1	Cebpb	ENSRNOG0000057347	CCAAT/enhancer binding protein beta Source RGD Symbol Acc 2327
B04	SBR1191843	ENSRNOT00000057461.4	Col4a2	ENSRNOG0000023972	collagen type IV alpha 2 chain Source RGD Symbol Acc 1308085
B05	SBR1179341	ENSRNOT00000049654.4	Creb1	ENSRNOG0000013412	cAMP responsive element binding protein 1 Source RGD Symbol Acc 620218
B06	SBR1185525	ENSRNOT00000085311.1	Creb3	ENSRNOG0000016452	cAMP responsive element binding protein 3 Source RGD Symbol Acc 1308831
B07	SBR1122169	ENSRNOT00000032062.4	Creb3l4	ENSRNOG0000023493	cAMP responsive element binding protein 3-like 4 Source RGD Symbol Acc 1359278
B08	SBR1133606	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
B09	SBR1155250	ENSRNOT00000092738.1	Cyb561	ENSRNOG0000007433	cytochrome b-561 Source RGD Symbol Acc 1310987
B10	SBR1144588	ENSRNOT00000085026.1	Ddit4	ENSRNOG0000057078	DNA-damage-inducible transcript 4 Source RGD Symbol Acc 621731
B11	SBR1206082	ENSRNOT00000044842.2	Diras2	ENSRNOG0000032328	DIRAS family GTPase 2 Source RGD Symbol Acc 1305580
B12	SBR1102337	ENSRNOT00000005383.5	Dusp1	ENSRNOG0000003977	dual specificity phosphatase 1 Source RGD Symbol Acc 620897
C01	SBR1168689	ENSRNOT00000019361.2	Edn1	ENSRNOG0000014361	endothelin 1 Source RGD Symbol Acc 2532
C02	SBR1213530	ENSRNOT00000010419.3	Ehd3	ENSRNOG0000007744	EH-domain containing 3 Source RGD Symbol Acc 621762
C03	SBR1131422	ENSRNOT00000085315.1	Errfi1	ENSRNOG0000058186	ERBB receptor feedback inhibitor 1 Source RGD Symbol Acc 1307599
C04	SBR1101312	ENSRNOT00000033119.5	Fkbp5	ENSRNOG0000022523	FKBP prolyl isomerase 5 Source RGD Symbol Acc 1309155
C05	SBR1154542	ENSRNOT00000077894.1	Fosl2	ENSRNOG0000052357	FOS like 2, AP-1 transcription factor subunit Source RGD Symbol Acc 2628
C06	SBR1158113	ENSRNOT00000079311.1	Gdpd1	ENSRNOG0000060561	glycerophosphodiester phosphodiesterase domain containing 1 Source RGD Symbol Acc 1311813
C07	SBR1120020	ENSRNOT00000044578.2	Ghrhr	ENSRNOG0000011808	growth hormone releasing hormone receptor Source RGD Symbol Acc 2688
C08	SBR1200434	ENSRNOT00000075480.2	Glul	ENSRNOG0000049560	glutamate-ammonia ligase Source RGD Symbol Acc 2710
C09	SBR1182688	ENSRNOT00000022309.7	Got1	ENSRNOG0000016356	glutamic-oxaloacetic transaminase 1 Source RGD Symbol Acc 2721
C10	SBR1212355	ENSRNOT00000023543.5	H6pd	ENSRNOG0000017523	hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) Source RGD Symbol Acc 1306562
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1173111	006517.4	Has2	000004854	hyaluronan synthase 2 Source RGD Symbol Acc 2781
C12	SBR1202186	ENSRNOT0000009175.6	Hnrnp11	ENSRNOG0000006929	heterogeneous nuclear ribonucleoprotein L-like Source RGD Symbol Acc 1305861
D01	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG0000004647	interleukin 10 Source RGD Symbol Acc 2886
D02	SBR1111330	ENSRNOT00000007949.6	Il1rn	ENSRNOG0000005871	interleukin 1 receptor antagonist Source RGD Symbol Acc 621159
D03	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
D04	SBR1135762	ENSRNOT00000028234.7	Il6r	ENSRNOG0000020811	interleukin 6 receptor Source RGD Symbol Acc 2902
D05	SBR1163892	ENSRNOT00000066380.1	Klf13	ENSRNOG0000015822	Kruppel-like factor 13 Source RGD Symbol Acc 1565099
D06	SBR1172167	ENSRNOT00000019367.2	Klf9	ENSRNOG0000014215	Kruppel-like factor 9 Source RGD Symbol Acc 70934
D07	SBR1129018	ENSRNOT00000019844.6	Lox	ENSRNOG0000014426	lysyl oxidase Source RGD Symbol Acc 3015
D08	SBR1139919	ENSRNOT00000023419.4	Mertk	ENSRNOG0000017319	MER proto-oncogene, tyrosine kinase Source RGD Symbol Acc 69283
D09	SBR1218534	ENSRNOT00000038212.5	AC128848.1	ENSRNOG0000025764	
D10	SBR1194539	ENSRNOT00000067391.1	Mt2A	ENSRNOG0000043098	metallothionein 2A Source RGD Symbol Acc 1592345
D11	SBR1120974	ENSRNOT00000009894.6	Nfkbia	ENSRNOG0000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
D12	SBR1127733	ENSRNOT00000044287.4	AABR07031756.1	ENSRNOG0000014096	nuclear receptor subfamily 3, group C, member 1 Source NCBI gene Acc 24413
E01	SBR1152356	ENSRNOT00000019258.6	Pcd7	ENSRNOG0000014340	programmed cell death 7 Source RGD Symbol Acc 1308961
E02	SBR1100630	ENSRNOT000000086033.1	Pdgfrb	ENSRNOG0000018461	platelet derived growth factor receptor beta Source RGD Symbol Acc 3285
E03	SBR1121695	ENSRNOT000000090376.1	Pdp1	ENSRNOG0000016180	pyruvate dehydrogenase phosphatase catalytic subunit 1 Source RGD Symbol Acc 620393
E04	SBR1195211	ENSRNOT000000057136.3	Per1	ENSRNOG0000007387	period circadian regulator 1 Source RGD Symbol Acc 727863
E05	SBR1143862	ENSRNOT00000027506.5	Per2	ENSRNOG0000020254	period circadian regulator 2 Source RGD Symbol Acc 61945
E06	SBR1155861	ENSRNOT00000025687.7	Pik3r1	ENSRNOG0000018903	phosphoinositide-3-kinase regulatory subunit 1 Source RGD Symbol Acc 3329
E07	SBR1102001	ENSRNOT000000091545.1	Pld1	ENSRNOG0000028156	phospholipase D1 Source RGD Symbol Acc 3349
E08	SBR1097739	ENSRNOT00000020383.5	Plekhf1	ENSRNOG0000027724	pleckstrin homology and FYVE domain containing 1 Source RGD Symbol Acc 1310544
E09	SBR1137967	ENSRNOT000000087096.1	Pou2f1	ENSRNOG0000003581	POU class 2 homeobox 1 Source RGD Symbol Acc 621689
E10	SBR1199068	ENSRNOT000000087572.1	Pou2f2	ENSRNOG0000055650	POU class 2 homeobox 2 Source RGD Symbol Acc 621690
E11	SBR1202609	ENSRNOT000000080963.2	Rasa3	ENSRNOG0000017671	RAS p21 protein activator 3 Source RGD Symbol Acc 69365
E12	SBR1199490	ENSRNOT00000005156.6	Rgs2	ENSRNOG0000003687	regulator of G-protein signaling 2 Source RGD Symbol Acc 621665
F01	SBR1104546	ENSRNOT000000008008.3	Rhob	ENSRNOG0000021403	ras homolog family member B Source RGD Symbol Acc 621309
F02	SBR1150122	ENSRNOT000000031979.4	Rhoj	ENSRNOG0000021919	ras homolog family member J Source RGD Symbol Acc 1310528
F03	SBR1202565	ENSRNOT000000065890.1	Sesn1	ENSRNOG0000000302	sestrin 1 Source RGD Symbol Acc 1307517
F04	SBR1176764	ENSRNOT000000016121.5	Sgk1	ENSRNOG0000011815	serum/glucocorticoid regulated kinase 1 Source RGD Symbol Acc 3668
F05	SBR1098322	ENSRNOT000000088508.1	Slc10a6	ENSRNOG0000002057	solute carrier family 10 member 6 Source RGD Symbol Acc 727800
F06	SBR1196079	ENSRNOT000000076722.2	Slc19a2	ENSRNOG0000002839	solute carrier family 19 member 2 Source RGD Symbol Acc 1308611
F07	SBR1118779	ENSRNOT000000081898.1	Slc22a5	ENSRNOG0000008432	solute carrier family 22 member 5 Source RGD Symbol Acc 3702
F08	SBR1098054	ENSRNOT000000021715.6	Snta1	ENSRNOG0000016062	syntrophin, alpha 1 Source RGD Symbol Acc 1307068
F09	SBR1204599	ENSRNOT000000032163.5	Sphk1	ENSRNOG0000010626	sphingosine kinase 1 Source RGD Symbol Acc 620048
F10	SBR1109689	ENSRNOT000000023287.5	Spsb1	ENSRNOG0000017212	splA/ryanodine receptor domain and SOCS box containing 1 Source RGD Symbol Acc 1309319

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1147063	ENSRNOT00000026662.3	Stat5a	ENSRNOG0000019496	signal transducer and activator of transcription 5A Source RGD Symbol Acc 3773
F12	SBR1101487	ENSRNOT00000081247.1	Stat5b	ENSRNOG0000019075	signal transducer and activator of transcription 5B Source RGD Symbol Acc 3774
G01	SBR1178609	ENSRNOT00000015573.4	Tb11xr1	ENSRNOG0000011216	transducin (beta)-like 1 X-linked receptor 1 Source RGD Symbol Acc 1560053
G02	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG0000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	SBR1176636	ENSRNOT00000010591.4	Tp53inp1	ENSRNOG0000007964	tumor protein p53 inducible nuclear protein 1 Source RGD Symbol Acc 631423
G04	SBR1123278	ENSRNOT00000085118.1	Tsc22d3	ENSRNOG0000056135	TSC22 domain family, member 3 Source RGD Symbol Acc 621654
G05	SBR1193112	ENSRNOT00000036051.6	Usp2	ENSRNOG0000006663	ubiquitin specific peptidase 2 Source RGD Symbol Acc 621073
G06	SBR1156482	ENSRNOT00000083467.1	Usp54	ENSRNOG0000027012	ubiquitin specific peptidase 54 Source RGD Symbol Acc 1303206
G07	SBR1167735	ENSRNOT00000082429.1	Vdr	ENSRNOG0000054420	vitamin D receptor Source RGD Symbol Acc 3959
G08	SBR1213919	ENSRNOT00000035814.3	Vldlr	ENSRNOG0000027491	very low density lipoprotein receptor Source RGD Symbol Acc 3963
G09	SBR1150107	ENSRNOT00000009634.6	Xdh	ENSRNOG0000007081	xanthine dehydrogenase Source RGD Symbol Acc 62043
G10	SBR1135946	ENSRNOT00000088133.1	Zfp281	ENSRNOG0000058643	zinc finger protein 281 Source RGD Symbol Acc 1305139
G11	SBR1127302	ENSRNOT00000090129.2	Zfp36	ENSRNOG0000058388	zinc finger protein 36 Source RGD Symbol Acc 620722
G12	SBR1128003	ENSRNOT00000032588.5	Zhx3	ENSRNOG0000027988	zinc fingers and homeoboxes 3 Source RGD Symbol Acc 631431
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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