

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

## Rat Allergy & Asthma

Cat. no. 249950 SBRN-067ZR

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

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adam33	Adrb2	Alox5	Areg	Arg1	Bcl6	Ccl11	Ccl12	Ccl17	Ccl22	Ccl24	Ccl4
B	Cd5	Ccr3	Ccr4	Ccr8	Cd40lg	Chi3l1	Chia	Cica1	Cma1	Cpo3	Crif2	Csf2
C	Caf3r	Cysltr1	LOC100361866	Epx	Ets1	Fcer1a	Foxp3	Gata3	Pigdr2	Icos	Ifng	Ifngr2
D	Il10	Il12a	Il12b	Il13	Il13ra1	Il13ra2	Il17a	Il17rb	Il18	Il1rl1	Il21	Il25
E	Il2ra	Il3	Il33	Il3ra	Il4	Il4r	Il5	Il5ra	Il6	Il9	Itga4	Kit
F	Kitlg	Ltb4r	Maf	Mmp9	Mrc1	Ms4a2	NEWGENE_1311658	Pmch	Postn	Pparg	Prg2	Rnase17
G	Rnase2	Rorc	Satb1	Spi1	Stat1	Stat5a	Stat6	Tbx21	Tgfb1	Tnfsf4	Tnfsf4	Tpsb2
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	PPC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1151478	ENSRNOT00000 051404.6	Adam33	ENSRNOG00 000021242	ADAM metallopeptidase domain 33 Source RGD Symbol Acc 1305278
A02	SBR1208091	ENSRNOT00000 026098.3	Adrb2	ENSRNOG00 000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A03	SBR1113879	ENSRNOT00000 017633.5	Alox5	ENSRNOG00 000012972	arachidonate 5-lipoxygenase Source RGD Symbol Acc 2096
A04	SBR1097652	ENSRNOT00000 003703.4	Areg	ENSRNOG00 000002754	amphiregulin Source RGD Symbol Acc 2149
A05	SBR1104555	ENSRNOT00000 017911.5	Arg1	ENSRNOG00 000013304	arginase 1 Source RGD Symbol Acc 2150
A06	SBR1158306	ENSRNOT00000 002522.4	Bcl6	ENSRNOG00 000001843	BCL6, transcription repressor Source RGD Symbol Acc 1309345
A07	SBR1164698	ENSRNOT00000 009756.5	Ccl11	ENSRNOG00 000007335	C-C motif chemokine ligand 11 Source RGD Symbol Acc 3644
A08	SBR1129555	ENSRNOT00000 031626.5	Ccl12	ENSRNOG00 000029768	chemokine (C-C motif) ligand 12 Source RGD Symbol Acc 1309255
A09	SBR1197042	ENSRNOT00000 021842.2	Ccl17	ENSRNOG00 000016278	C-C motif chemokine ligand 17 Source RGD Symbol Acc 619924
A10	SBR1108415	ENSRNOT00000 022167.3	Ccl22	ENSRNOG00 000016535	C-C motif chemokine ligand 22 Source RGD Symbol Acc 619933
A11	SBR1128762	ENSRNOT00000 045157.3	Ccl24	ENSRNOG00 000031162	C-C motif chemokine ligand 24 Source RGD Symbol Acc 1310245
A12	SBR1202700	ENSRNOT00000 015199.3	Cd4	ENSRNOG00 000011406	C-C motif chemokine ligand 4 Source RGD Symbol Acc 620441
B01	SBR1094349	ENSRNOT00000 014865.6	Cd5	ENSRNOG00 000010906	C-C motif chemokine ligand 5 Source RGD Symbol Acc 69069
B02	SBR1110610	ENSRNOT00000 008809.4	Ccr3	ENSRNOG00 000006736	C-C motif chemokine receptor 3 Source RGD Symbol Acc 620593
B03	SBR1113127	ENSRNOT00000 013705.3	Ccr4	ENSRNOG00 000010315	C-C motif chemokine receptor 4 Source RGD Symbol Acc 620594
B04	SBR1138241	ENSRNOT00000 029766.1	Ccr8	ENSRNOG00 000026759	C-C motif chemokine receptor 8 Source RGD Symbol Acc 1304893
B05	SBR1110042	ENSRNOT00000 001162.4	Cd40lg	ENSRNOG00 000000871	CD40 ligand Source RGD Symbol Acc 708418
B06	SBR1100452	ENSRNOT00000 078599.1	Chi3l1	ENSRNOG00 000053272	chitinase 3 like 1 Source RGD Symbol Acc 620874
B07	SBR1123990	ENSRNOT00000 086321.1	Chia	ENSRNOG00 000033162	chitinase, acidic Source RGD Symbol Acc 1303058
B08	SBR1123424	ENSRNOT00000 084996.1	Clca1	ENSRNOG00 000060831	chloride channel accessory 1 Source RGD Symbol Acc 1306258
B09	SBR1204110	ENSRNOT00000 067539.2	Cma1	ENSRNOG00 000020563	chymase 1 Source RGD Symbol Acc 2365
B10	SBR1140688	ENSRNOT00000 014970.7	Cpa3	ENSRNOG00 000011181	carboxypeptidase A3 Source RGD Symbol Acc 2390
B11	SBR1148850	ENSRNOT00000 075656.1	Crlf2	ENSRNOG00 000049828	cytokine receptor-like factor 2 Source RGD Symbol Acc 621078
B12	SBR1136894	ENSRNOT00000 032333.3	Csf2	ENSRNOG00 000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
C01	SBR1166022	ENSRNOT00000 011694.6	Csf3r	ENSRNOG00 000008759	colony stimulating factor 3 receptor Source RGD Symbol Acc 1309114
C02	SBR1145677	ENSRNOT00000 042799.4	Cysltr1	ENSRNOG00 000037845	cysteinyl leukotriene receptor 1 Source RGD Symbol Acc 619796
C03	SBR1095990	ENSRNOT00000 040857.2	LOC10036 1866	ENSRNOG00 000031445	ribonuclease A family member 3 Source RGD Symbol Acc 621580
C04	SBR1104594	ENSRNOT00000 011735.4	Epx	ENSRNOG00 000008707	eosinophil peroxidase Source RGD Symbol Acc 1311882
C05	SBR1138162	ENSRNOT00000 011925.4	Ets1	ENSRNOG00 000008941	ETS proto-oncogene 1, transcription factor Source RGD Symbol Acc 2583
C06	SBR1184235	ENSRNOT00000 083561.1	Fcer1a	ENSRNOG00 000009177	Fc fragment of IgE receptor Ia Source RGD Symbol Acc 2597
C07	SBR1152159	ENSRNOT00000 091146.1	Foxp3	ENSRNOG00 000011702	forkhead box P3 Source RGD Symbol Acc 1562112
C08	SBR1158985	ENSRNOT00000 026187.5	Gata3	ENSRNOG00 000019336	GATA binding protein 3 Source RGD Symbol Acc 621250
C09	SBR1199317	ENSRNOT00000 054808.4	Ptgdr2	ENSRNOG00 000036631	prostaglandin D2 receptor 2 Source RGD Symbol Acc 1311986
C10	SBR1183072	ENSRNOT00000 071226.2	Icos	ENSRNOG00 000046196	inducible T-cell co-stimulator Source RGD Symbol Acc 620123
		ENSRNOT00000		ENSRNOG00	

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
C11	SBR1108917	009919.2	Ifng	000007468	interferon gamma Source RGD Symbol Acc 2866
C12	SBR1178977	ENSRNOT00000 002779.5	Ifngr2	ENSRNOG00 000002032	interferon gamma receptor 2 Source RGD Symbol Acc 1307532
D01	SBR1123238	ENSRNOT00000 006246.5	Il10	ENSRNOG00 000004647	interleukin 10 Source RGD Symbol Acc 2886
D02	SBR1107831	ENSRNOT00000 012831.3	Il12a	ENSRNOG00 000009468	interleukin 12A Source RGD Symbol Acc 620562
D03	SBR1133771	ENSRNOT00000 005898.6	Il12b	ENSRNOG00 000004380	interleukin 12B Source RGD Symbol Acc 628704
D04	SBR1178777	ENSRNOT00000 010121.2	Il13	ENSRNOG00 000007652	interleukin 13 Source RGD Symbol Acc 68949
D05	SBR1107184	ENSRNOT00000 017746.6	Il13ra1	ENSRNOG00 000013170	interleukin 13 receptor subunit alpha 1 Source RGD Symbol Acc 628741
D06	SBR1131164	ENSRNOT00000 084465.1	Il13ra2	ENSRNOG00 000032973	interleukin 13 receptor subunit alpha 2 Source RGD Symbol Acc 620838
D07	SBR1131301	ENSRNOT00000 016644.4	Il17a	ENSRNOG00 000012467	interleukin 17A Source RGD Symbol Acc 2888
D08	SBR1202587	ENSRNOT00000 020823.6	Il17rb	ENSRNOG00 000015498	interleukin 17 receptor B Source RGD Symbol Acc 1311392
D09	SBR1183288	ENSRNOT00000 013093.6	Il18	ENSRNOG00 000009848	interleukin 18 Source RGD Symbol Acc 2889
D10	SBR1195120	ENSRNOT00000 020108.5	Il1rl1	ENSRNOG00 000014835	interleukin 1 receptor-like 1 Source RGD Symbol Acc 2894
D11	SBR1166751	ENSRNOT00000 023348.4	Il21	ENSRNOG00 000017376	interleukin 21 Source RGD Symbol Acc 1307384
D12	SBR1215520	ENSRNOT00000 022563.4	Il25	ENSRNOG00 000016804	interleukin 25 Source RGD Symbol Acc 1561632
E01	SBR1164904	ENSRNOT00000 073144.2	Il2ra	ENSRNOG00 000047647	interleukin 2 receptor subunit alpha Source RGD Symbol Acc 2895
E02	SBR1198875	ENSRNOT00000 031762.1	Il3	ENSRNOG00 000026786	interleukin 3 Source RGD Symbol Acc 2897
E03	SBR1152021	ENSRNOT00000 022056.7	Il33	ENSRNOG00 000016456	interleukin 33 Source RGD Symbol Acc 1311155
E04	SBR1180141	ENSRNOT00000 001792.4	Il3ra	ENSRNOG00 000001325	interleukin 3 receptor subunit alpha Source RGD Symbol Acc 628728
E05	SBR1101847	ENSRNOT00000 010029.3	Il4	ENSRNOG00 000007624	interleukin 4 Source RGD Symbol Acc 2898
E06	SBR1170720	ENSRNOT00000 020994.5	Il4r	ENSRNOG00 000015441	interleukin 4 receptor Source RGD Symbol Acc 2899
E07	SBR1179555	ENSRNOT00000 010729.4	Il5	ENSRNOG00 000008111	interleukin 5 Source RGD Symbol Acc 2900
E08	SBR1113791	ENSRNOT00000 008403.3	Il5ra	ENSRNOG00 000005954	interleukin 5 receptor subunit alpha Source RGD Symbol Acc 70938
E09	SBR1156877	ENSRNOT00000 013732.6	Il6	ENSRNOG00 0000010278	interleukin 6 Source RGD Symbol Acc 2901
E10	SBR1140896	ENSRNOT00000 016187.2	Il9	ENSRNOG00 0000012131	interleukin 9 Source RGD Symbol Acc 620049
E11	SBR1153753	ENSRNOT00000 006880.6	Itga4	ENSRNOG00 000004861	integrin subunit alpha 4 Source RGD Symbol Acc 1593249
E12	SBR1117090	ENSRNOT00000 090654.1	Kit	ENSRNOG00 000002227	KIT proto-oncogene receptor tyrosine kinase Source RGD Symbol Acc 620568
F01	SBR1164095	ENSRNOT00000 085097.1	Kitlg	ENSRNOG00 000005386	KIT ligand Source RGD Symbol Acc 3086
F02	SBR1152753	ENSRNOT00000 027647.2	Ltib4r	ENSRNOG00 000020399	leukotriene B4 receptor Source RGD Symbol Acc 620410
F03	SBR1131539	ENSRNOT00000 016577.5	Maf	ENSRNOG00 0000012428	MAF bZIP transcription factor Source RGD Symbol Acc 3034
F04	SBR1206750	ENSRNOT00000 023965.3	Mmp9	ENSRNOG00 0000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
F05	SBR1181845	ENSRNOT00000 024736.7	Mrc1	ENSRNOG00 0000018251	mannose receptor, C type 1 Source RGD Symbol Acc 1309353
F06	SBR1170225	ENSRNOT00000 028491.3	Ms4a2	ENSRNOG00 0000020993	membrane spanning 4-domains A2 Source RGD Symbol Acc 2598
F07	SBR1164719	ENSRNOT00000 074915.1	NEWGENE_1311658	ENSRNOG00 0000049797	programmed cell death 1 Source RGD Symbol Acc 1311658
F08	SBR1168279	ENSRNOT00000 006174.3	Pmch	ENSRNOG00 000004632	pro-melanin-concentrating hormone Source RGD Symbol Acc 3358
F09	SBR1157129	ENSRNOT00000 017453.3	Postn	ENSRNOG00 0000012660	periostin Source RGD Symbol Acc 1305285
F10	SBR1131520	ENSRNOT00000 082969.1	Pparg	ENSRNOG00 000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
F11	SBR1166705	ENSRNOT00000 011168.3	Prg2	ENSRNOG00 000008394	proteoglycan 2 Source RGD Symbol Acc 69336
F12	SBR1191106	ENSRNOT00000 048941.2	Rnase17	ENSRNOG00 000050295	ribonuclease 17 Source RGD Symbol Acc 1359245
G01	SBR1136909	ENSRNOT00000 050820.1	Rnase2	ENSRNOG00 000032133	ribonuclease A family member 2 Source RGD Symbol Acc 1359432
G02	SBR1114012	ENSRNOT00000 067042.3	Rorc	ENSRNOG00 000020836	RAR-related orphan receptor C Source RGD Symbol Acc 1595785
G03	SBR1099307	ENSRNOT00000 017556.6	Satb1	ENSRNOG00 000012942	SATB homeobox 1 Source RGD Symbol Acc 1305561
G04	SBR1178314	ENSRNOT00000 016306.6	Spi1	ENSRNOG00 000012172	Spi-1 proto-oncogene Source RGD Symbol Acc 1359607
G05	SBR1199428	ENSRNOT00000 080522.1	Stat1	ENSRNOG00 000014079	signal transducer and activator of transcription 4 Source RGD Symbol Acc 1305747
G06	SBR1147063	ENSRNOT00000 026662.3	Stat5a	ENSRNOG00 000019496	signal transducer and activator of transcription 5A Source RGD Symbol Acc 3773
G07	SBR1207811	ENSRNOT00000 085350.1	Stat6	ENSRNOG00 000025023	signal transducer and activator of transcription 6 Source RGD Symbol Acc 1309063
G08	SBR1137931	ENSRNOT00000 012538.5	Tbx21	ENSRNOG00 000009427	T-box 21 Source RGD Symbol Acc 1308264
G09	SBR1143485	ENSRNOT00000 028051.4	Tgfb1	ENSRNOG00 000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G10	SBR1199323	ENSRNOT00000 027251.4	Tnfrsf4	ENSRNOG00 000020106	TNF receptor superfamily member 4 Source RGD Symbol Acc 3920
G11	SBR1194073	ENSRNOT00000 003969.5	Tnfsf4	ENSRNOG00 000002968	TNF superfamily member 4 Source RGD Symbol Acc 619816
G12	SBR1189486	ENSRNOT00000 025220.6	Tpsb2	ENSRNOG00 000018611	tryptase beta 2 Source RGD Symbol Acc 3065
H01	SBR1220567	ENSRNOT00000 042459.4	Actb	ENSRNOG00 000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000 023017.5	B2m	ENSRNOG00 000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000 065935.3	Hprt1	ENSRNOG00 000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000 017468.2	Ldha	ENSRNOG00 000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000 018820.5	Rplp1	ENSRNOG00 000013874	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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.