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

Rat Common Cytokines

Cat. no. 249950 SBRN-021ZA

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adipoq	Aimp1	Areg	Bmp1	Bmp2	Bmp3	Bmp4	Bmp5	Bmp6	Bmp7	C5	Cd40lg
B	Cd70	Cntf	Csf1	Csf2	Csf3	Ctf1	Faslg	Fgf10	Gdf15	Gdf5	Gdf9	Grem1
C	Ifna5	Ifna2	Ifna4	Ifnb1	Ifng	Il10	Il11	Il12a	Il12b	Il13	Il15	Il16
D	Il17a	Il17b	Il17f	Il18	Il1a	Il1b	Il1rn	Il2	Il20	Il21	Il22	Il23a
E	Il24	Il27	Il3	Il33	Il4	Il5	Il6	Il7	Il9	Inha	Inhba	Lif
F	Lta	LOC103694381	LOC103694877	Mstn	Nampt	Nodal	Nrg1	Osm	Scgb3a1	Spp1	Tgfb1	Tgfb2
G	Thpo1	LOC103694380	Tnfrsf11b	Tnfsf10	LOC103689974	Tnfsf12	Tnfsf13	Tnfsf15	Tnfsf18	Tnfsf4	Tnfsf9	Vegfa
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	SBR1209814	ENSRNOT00000002492.5	Adipoq	ENSRNOG00000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A02	SBR1099623	ENSRNOT00000015213.6	Aimp1	ENSRNOG00000011384	aminoacyl tRNA synthetase complex-interacting multifunctional protein 1 Source RGD Symbol Acc 620466
A03	SBR1097652	ENSRNOT00000003703.4	Areg	ENSRNOG00000002754	amphiregulin Source RGD Symbol Acc 2149
A04	SBR1170880	ENSRNOT00000046054.4	Bmp1	ENSRNOG00000010890	bone morphogenetic protein 1 Source RGD Symbol Acc 620739
A05	SBR1127251	ENSRNOT00000028904.4	Bmp2	ENSRNOG00000021276	bone morphogenetic protein 2 Source RGD Symbol Acc 2211
A06	SBR1184728	ENSRNOT00000038872.3	Bmp3	ENSRNOG00000002381	bone morphogenetic protein 3 Source RGD Symbol Acc 2212
A07	SBR1132271	ENSRNOT00000012957.6	Bmp4	ENSRNOG00000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A08	SBR1175011	ENSRNOT00000014846.5	Bmp5	ENSRNOG00000010917	bone morphogenetic protein 5 Source RGD Symbol Acc 1305979
A09	SBR1213989	ENSRNOT00000018359.7	Bmp6	ENSRNOG00000013717	bone morphogenetic protein 6 Source RGD Symbol Acc 2214
A10	SBR1093977	ENSRNOT00000084990.1	Bmp7	ENSRNOG00000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A11	SBR1149597	ENSRNOT00000092736.1	C5	ENSRNOG00000018899	complement C5 Source RGD Symbol Acc 2237
A12	SBR1110042	ENSRNOT00000001162.4	Cd40lg	ENSRNOG00000000871	CD40 ligand Source RGD Symbol Acc 708418
B01	SBR1113183	ENSRNOT00000070806.1	Cd70	ENSRNOG00000051015	Cd70 molecule Source RGD Symbol Acc 1588573
B02	SBR1188692	ENSRNOT00000016690.2	Cntf	ENSRNOG00000012460	ciliary neurotrophic factor Source RGD Symbol Acc 2370
B03	SBR1099651	ENSRNOT00000025222.6	Csf1	ENSRNOG00000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B04	SBR1136894	ENSRNOT00000032333.3	Csf2	ENSRNOG00000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B05	SBR1124341	ENSRNOT00000011509.3	Csf3	ENSRNOG00000008525	colony stimulating factor 3 Source RGD Symbol Acc 2426
B06	SBR1138934	ENSRNOT00000025646.2	Ctf1	ENSRNOG00000018962	cardiotrophin 1 Source RGD Symbol Acc 2442
B07	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG00000002978	Fas ligand Source RGD Symbol Acc 3880
B08	SBR1145306	ENSRNOT00000016485.3	Fgf10	ENSRNOG00000012278	fibroblast growth factor 10 Source RGD Symbol Acc 2606
B09	SBR1178933	ENSRNOT00000026652.3	Gdf15	ENSRNOG00000019661	growth differentiation factor 15 Source RGD Symbol Acc 2674
B10	SBR1201122	ENSRNOT00000071099.1	Gdf5	ENSRNOG00000050123	growth differentiation factor 5 Source RGD Symbol Acc 620102
B11	SBR1135825	ENSRNOT00000009727.2	Gdf9	ENSRNOG00000007301	growth differentiation factor 9 Source RGD Symbol Acc 71038
B12	SBR1204904	ENSRNOT00000037895.3	Grem1	ENSRNOG00000026053	gremlin 1, DAN family BMP antagonist Source RGD Symbol Acc 2359
C01	SBR1208793	ENSRNOT00000049705.1	Ifna5	ENSRNOG00000031046	interferon, alpha 5 Source RGD Symbol Acc 1359312
C02	SBR1194217	ENSRNOT00000045433.4	Ifna2	ENSRNOG00000058365	interferon alpha 2 Source RGD Symbol Acc 1311425
C03	SBR1135615	ENSRNOT00000046207.3	Ifna4	ENSRNOG00000033823	interferon, alpha 4 Source RGD Symbol Acc 1306334
C04	SBR1104910	ENSRNOT00000008224.2	Ifnb1	ENSRNOG00000006268	interferon beta 1 Source RGD Symbol Acc 2865
C05	SBR1108917	ENSRNOT00000009919.2	Ifng	ENSRNOG00000007468	interferon gamma Source RGD Symbol Acc 2866
C06	SBR1123238	ENSRNOT00000006246.5	Il10	ENSRNOG00000004647	interleukin 10 Source RGD Symbol Acc 2886
C07	SBR1192221	ENSRNOT00000023489.5	Il11	ENSRNOG00000017386	interleukin 11 Source RGD Symbol Acc 621475
C08	SBR1107831	ENSRNOT00000012831.3	Il12a	ENSRNOG00000009468	interleukin 12A Source RGD Symbol Acc 620562
C09	SBR1133771	ENSRNOT00000005898.6	Il12b	ENSRNOG00000004380	interleukin 12B Source RGD Symbol Acc 628704
C10	SBR1178777	ENSRNOT00000010121.2	Il13	ENSRNOG00000007652	interleukin 13 Source RGD Symbol Acc 68949
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1188273	004590.6	Il15	000003439	interleukin 15 Source RGD Symbol Acc 2887
C12	SBR1105763	ENSRNOT00000016289.4	Il16	ENSRNOG00000011680	interleukin 16 Source RGD Symbol Acc 1583872
D01	SBR1131301	ENSRNOT00000016664.4	Il17a	ENSRNOG00000012467	interleukin 17A Source RGD Symbol Acc 2888
D02	SBR1144269	ENSRNOT00000026679.6	Il17b	ENSRNOG00000019695	interleukin 17B Source RGD Symbol Acc 620614
D03	SBR1096678	ENSRNOT00000016717.5	Il17f	ENSRNOG00000012509	interleukin 17F Source RGD Symbol Acc 1311398
D04	SBR1183288	ENSRNOT00000013093.6	Il18	ENSRNOG00000009848	interleukin 18 Source RGD Symbol Acc 2889
D05	SBR1106125	ENSRNOT00000006113.8	Il1a	ENSRNOG00000004575	interleukin 1 alpha Source RGD Symbol Acc 2890
D06	SBR1196387	ENSRNOT00000006308.4	Il1b	ENSRNOG00000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D07	SBR1111330	ENSRNOT00000007949.6	Il1rn	ENSRNOG00000005871	interleukin 1 receptor antagonist Source RGD Symbol Acc 621159
D08	SBR1102170	ENSRNOT00000023327.2	Il2	ENSRNOG00000017348	interleukin 2 Source RGD Symbol Acc 620047
D09	SBR1170660	ENSRNOT00000067006.2	Il20	ENSRNOG00000004633	interleukin 20 Source RGD Symbol Acc 1583578
D10	SBR1166751	ENSRNOT00000023348.4	Il21	ENSRNOG00000017376	interleukin 21 Source RGD Symbol Acc 1307384
D11	SBR1099298	ENSRNOT00000009776.4	Il22	ENSRNOG00000007365	interleukin 22 Source RGD Symbol Acc 1561292
D12	SBR1176508	ENSRNOT00000004363.3	Il23a	ENSRNOG00000003254	interleukin 23 subunit alpha Source RGD Symbol Acc 620873
E01	SBR1173960	ENSRNOT00000006106.3	Il24	ENSRNOG00000004470	interleukin 24 Source RGD Symbol Acc 621484
E02	SBR1210167	ENSRNOT00000025950.5	Il27	ENSRNOG00000019170	interleukin 27 Source RGD Symbol Acc 1561420
E03	SBR1198875	ENSRNOT00000031762.1	Il3	ENSRNOG00000026786	interleukin 3 Source RGD Symbol Acc 2897
E04	SBR1152021	ENSRNOT00000022056.7	Il33	ENSRNOG00000016456	interleukin 33 Source RGD Symbol Acc 1311155
E05	SBR1101847	ENSRNOT00000010029.3	Il4	ENSRNOG00000007624	interleukin 4 Source RGD Symbol Acc 2898
E06	SBR1179555	ENSRNOT00000010729.4	Il5	ENSRNOG00000008111	interleukin 5 Source RGD Symbol Acc 2900
E07	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG00000010278	interleukin 6 Source RGD Symbol Acc 2901
E08	SBR1129975	ENSRNOT00000016091.7	Il7	ENSRNOG00000011973	interleukin 7 Source RGD Symbol Acc 2904
E09	SBR1140896	ENSRNOT00000016187.2	Il9	ENSRNOG00000012131	interleukin 9 Source RGD Symbol Acc 620049
E10	SBR1141256	ENSRNOT00000027227.4	Inha	ENSRNOG00000020097	inhibin subunit alpha Source RGD Symbol Acc 2912
E11	SBR1203713	ENSRNOT00000019272.5	Inhba	ENSRNOG00000014320	inhibin subunit beta A Source RGD Symbol Acc 62074
E12	SBR1155933	ENSRNOT00000009313.4	Lif	ENSRNOG00000007002	LIF, interleukin 6 family cytokine Source RGD Symbol Acc 620865
F01	SBR1181153	ENSRNOT00000088936.1	Lta	ENSRNOG00000000838	lymphotoxin alpha Source RGD Symbol Acc 3020
F02	SBR1203426	ENSRNOT00000089411.1	LOC103694381	ENSRNOG00000058566	lymphotoxin-beta Source RGD Symbol Acc 9083628
F03	SBR1136891	ENSRNOT00000008608.4	LOC103694877	ENSRNOG00000006589	macrophage migration inhibitory factor Source RGD Symbol Acc 621163
F04	SBR1131840	ENSRNOT00000038093.3	Mstn	ENSRNOG00000021294	myostatin Source RGD Symbol Acc 3115
F05	SBR1212040	ENSRNOT00000013043.6	Nampt	ENSRNOG00000009754	nicotinamide phosphoribosyltransferase Source RGD Symbol Acc 631365
F06	SBR1149225	ENSRNOT00000000672.4	Nodal	ENSRNOG00000000556	nodal growth differentiation factor Source RGD Symbol Acc 1305994
F07	SBR1158142	ENSRNOT00000014147.6	Nrg1	ENSRNOG00000010392	neuregulin 1 Source RGD Symbol Acc 621341
F08	SBR1214264	ENSRNOT00000035591.3	Osm	ENSRNOG00000024390	oncostatin M Source RGD Symbol Acc 1585012
F09	SBR1151851	ENSRNOT00000051916.3	Scgb3a1	ENSRNOG00000002718	secretoglobin, family 3A, member 1 Source RGD Symbol Acc 727901
F10	SBR1210860	ENSRNOT00000075989.1	Spp1	ENSRNOG00000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
F12	SBR1164140	ENSRNOT00000087023.1	Tgfb2	ENSRNOG00000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491
G01	SBR1179316	ENSRNOT00000073743.2	Thpol1	ENSRNOG00000050172	thrombopoietin like 1 Source RGD Symbol Acc 11455920
G02	SBR1187845	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	SBR1183920	ENSRNOT00000011344.5	Tnfrsf11b	ENSRNOG00000008336	TNF receptor superfamily member 11B Source RGD Symbol Acc 619802
G04	SBR1107258	ENSRNOT00000017758.5	Tnfsf10	ENSRNOG00000013269	TNF superfamily member 10 Source RGD Symbol Acc 628734
G05	SBR1170442	ENSRNOT00000049056.4	LOC103689974	ENSRNOG00000049547	TNF superfamily member 11 Source RGD Symbol Acc 620784
G06	SBR1162961	ENSRNOT00000064401.2	Tnfsf12	ENSRNOG00000045670	TNF superfamily member 12 Source RGD Symbol Acc 1359620
G07	SBR1180016	ENSRNOT00000090762.1	Tnfsf13	ENSRNOG00000014171	TNF superfamily member 13 Source RGD Symbol Acc 1305871
G08	SBR1161711	ENSRNOT00000011845.3	Tnfsf15	ENSRNOG00000008930	TNF superfamily member 15 Source RGD Symbol Acc 628735
G09	SBR1151292	ENSRNOT00000039221.5	Tnfsf18	ENSRNOG00000026607	TNF superfamily member 18 Source RGD Symbol Acc 1305066
G10	SBR1194073	ENSRNOT00000003969.5	Tnfsf4	ENSRNOG00000002968	TNF superfamily member 4 Source RGD Symbol Acc 619816
G11	SBR1142322	ENSRNOT00000071515.1	Tnfsf9	ENSRNOG00000045595	TNF superfamily member 9 Source RGD Symbol Acc 727974
G12	SBR1108862	ENSRNOT00000044163.4	Vegfa	ENSRNOG00000019598	vascular endothelial growth factor A Source RGD Symbol Acc 619991
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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