

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

Rat Macular Degeneration

Cat. no. 249950 SBRN-171ZA

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	Abca1	Abca4	Ace	Alb	Anxa2	Anxa5	Apoe	C2	C3	C4a	C5	C9
B	Cd11	Cd2	Cfb	Cfh	Cflhl	Cfi	Clu	Col14a1	Cp	Crp	Cryaa	Cryab
C	Crygd	Cst3	Ccn2	Ctsd	Cx3cr1	Cxcl2	Dicer1	Efemp1	Eln	Ercc6	Fancg	Faslg
D	Fbln5	Fn1	Gfap	Gstm1	Gstp1	Gstt1	Hif1a	Hmcn1	Hmox1	Hmox2	Htra1	Icam1
E	Igf1	Il6	Lep	Lipc	Lpl	Mmp2	Mmp9	Nos1	Nos3	Plg	Pon1	Rho
F	Ribp1	Rpe65	Sag	Scarb1	Serpine1	Serpinf1	Serpinl1	Slc4a1	Sod2	Sparc	Stmn1	Tf
G	Tgfb1	Thy1	Timp1	Timp3	Tlr3	Tlr4	Tnmd	Vegfa	Vim	Vldlr	Vtn	Vwf
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	SBR1139590	ENSRNOT00000024564.7	Abca1	ENSRNOG0000018126	ATP binding cassette subfamily A member 1 Source RGD Symbol Acc 631344
A02	SBR1173932	ENSRNOT00000017878.6	Abca4	ENSRNOG0000012892	ATP binding cassette subfamily A member 4 Source RGD Symbol Acc 1309445
A03	SBR1133139	ENSRNOT00000010627.8	Ace	ENSRNOG0000062101	angiotensin I converting enzyme Source RGD Symbol Acc 2493
A04	SBR1147524	ENSRNOT00000003921.4	Alb	ENSRNOG0000002911	albumin Source RGD Symbol Acc 2085
A05	SBR1121016	ENSRNOT00000038677.5	Anxa2	ENSRNOG0000010362	annexin A2 Source RGD Symbol Acc 621170
A06	SBR1096992	ENSRNOT00000019554.6	Anxa5	ENSRNOG0000014453	annexin A5 Source RGD Symbol Acc 2120
A07	SBR1123572	ENSRNOT00000080453.1	ApoE	ENSRNOG0000018454	apolipoprotein E Source RGD Symbol Acc 2138
A08	SBR1191338	ENSRNOT00000060607.4	C2	ENSRNOG0000051235	complement C2 Source RGD Symbol Acc 2231
A09	SBR1177146	ENSRNOT00000073042.3	C3	ENSRNOG0000046834	complement C3 Source RGD Symbol Acc 2232
A10	SBR1182212	ENSRNOT00000072377.2	C4a	ENSRNOG0000047657	complement C4A Source RGD Symbol Acc 620005
A11	SBR1149597	ENSRNOT00000092736.1	C5	ENSRNOG0000018899	complement C5 Source RGD Symbol Acc 2237
A12	SBR1178457	ENSRNOT00000018545.5	C9	ENSRNOG0000013736	complement C9 Source RGD Symbol Acc 620319
B01	SBR1164698	ENSRNOT00000009756.5	Ccl11	ENSRNOG0000007335	C-C motif chemokine ligand 11 Source RGD Symbol Acc 3644
B02	SBR1165601	ENSRNOT00000009448.3	Ccl2	ENSRNOG0000007159	C-C motif chemokine ligand 2 Source RGD Symbol Acc 3645
B03	SBR1130181	ENSRNOT00000075928.2	Cfb	ENSRNOG0000000419	complement factor B Source RGD Symbol Acc 2204
B04	SBR1134973	ENSRNOT00000060111.4	Cfh	ENSRNOG0000030715	complement factor H Source RGD Symbol Acc 620428
B05	SBR1150315	ENSRNOT00000079040.1	Cfhr1	ENSRNOG0000042901	complement factor H-related 1 Source RGD Symbol Acc 1310510
B06	SBR1098520	ENSRNOT00000086245.1	Cfi	ENSRNOG0000053400	complement factor I Source RGD Symbol Acc 620429
B07	SBR1134172	ENSRNOT00000078861.1	Clu	ENSRNOG0000016460	clusterin Source RGD Symbol Acc 3907
B08	SBR1163347	ENSRNOT00000067649.3	Col14a1	ENSRNOG0000026415	collagen type XIV alpha 1 chain Source RGD Symbol Acc 1305806
B09	SBR1193381	ENSRNOT00000016083.5	Cp	ENSRNOG0000011913	ceruloplasmin Source RGD Symbol Acc 2387
B10	SBR1169897	ENSRNOT00000000058.6	Crp	ENSRNOG0000000053	C-reactive protein Source RGD Symbol Acc 2411
B11	SBR1130295	ENSRNOT00000075545.3	Cryaa	ENSRNOG0000047175	crystallin, alpha A Source RGD Symbol Acc 2413
B12	SBR1151967	ENSRNOT00000059127.3	Cryab	ENSRNOG0000010524	crystallin, alpha B Source RGD Symbol Acc 2414
C01	SBR1176479	ENSRNOT00000050886.2	Crygd	ENSRNOG0000032219	crystallin, gamma D Source RGD Symbol Acc 2422
C02	SBR1198662	ENSRNOT00000007175.6	Cst3	ENSRNOG0000005195	cystatin C Source RGD Symbol Acc 2432
C03	SBR1133606	ENSRNOT00000089196.1	Ccn2	ENSRNOG0000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
C04	SBR1121073	ENSRNOT00000027407.4	Ctsd	ENSRNOG0000020206	cathepsin D Source RGD Symbol Acc 621511
C05	SBR1106590	ENSRNOT00000025019.2	Cx3cr1	ENSRNOG0000018509	C-X3-C motif chemokine receptor 1 Source RGD Symbol Acc 620137
C06	SBR1209894	ENSRNOT00000066670.3	Cxcl12	ENSRNOG0000013589	C-X-C motif chemokine ligand 12 Source RGD Symbol Acc 3651
C07	SBR1103073	ENSRNOT00000014405.7	Dicer1	ENSRNOG0000010711	dicer 1 ribonuclease III Source RGD Symbol Acc 1309381
C08	SBR1213720	ENSRNOT00000004764.7	Efemp1	ENSRNOG0000003553	EGF containing fibulin extracellular matrix protein 1 Source RGD Symbol Acc 1308528
C09	SBR1117360	ENSRNOT00000040069.6	ElN	ENSRNOG0000001469	elastin Source RGD Symbol Acc 67394
C10	SBR1130692	ENSRNOT00000088529.1	Ercc6	ENSRNOG0000030017	ERCC excision repair 6, chromatin remodeling factor Source RGD Symbol Acc 1311509
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1212568	078082.1	Fancg	000057945	FA complementation group G Source RGD Symbol Acc 1587477
C12	SBR1097457	ENSRNOT00000003998.2	Faslg	ENSRNOG0000002978	Fas ligand Source RGD Symbol Acc 3880
D01	SBR1180449	ENSRNOT00000084815.1	Fbln5	ENSRNOG00000050539	fibulin 5 Source RGD Symbol Acc 2594
D02	SBR1178912	ENSRNOT00000019772.6	Fn1	ENSRNOG0000014288	fibronectin 1 Source RGD Symbol Acc 2624
D03	SBR1140011	ENSRNOT00000034401.5	Gfap	ENSRNOG0000002919	glial fibrillary acidic protein Source RGD Symbol Acc 2679
D04	SBR1187255	ENSRNOT00000047139.3	Gstm1	ENSRNOG0000029726	glutathione S-transferase mu 1 Source RGD Symbol Acc 2755
D05	SBR1125046	ENSRNOT00000024601.4	Gstp1	ENSRNOG0000018237	glutathione S-transferase pi 1 Source RGD Symbol Acc 2758
D06	SBR1150596	ENSRNOT00000001669.4	Gstt1	ENSRNOG0000049771	glutathione S-transferase theta 1 Source RGD Symbol Acc 2765
D07	SBR1184753	ENSRNOT00000077935.1	Hif1a	ENSRNOG0000008292	hypoxia inducible factor 1 subunit alpha Source RGD Symbol Acc 61928
D08	SBR1107527	ENSRNOT00000093469.1	Hmcn1	ENSRNOG0000028627	hemicentin 1 Source RGD Symbol Acc 1564772
D09	SBR1146734	ENSRNOT00000019192.6	Hmox1	ENSRNOG0000014117	heme oxygenase 1 Source RGD Symbol Acc 2806
D10	SBR1107613	ENSRNOT00000005031.5	Hmox2	ENSRNOG0000003773	heme oxygenase 2 Source RGD Symbol Acc 67402
D11	SBR1192135	ENSRNOT00000027860.4	Htra1	ENSRNOG0000020533	HtrA serine peptidase 1 Source RGD Symbol Acc 69235
D12	SBR1152534	ENSRNOT00000028066.5	Icam1	ENSRNOG0000020679	intercellular adhesion molecule 1 Source RGD Symbol Acc 2857
E01	SBR1185495	ENSRNOT00000038780.6	Igf1	ENSRNOG0000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
E02	SBR1156877	ENSRNOT00000013732.6	Il6	ENSRNOG0000010278	interleukin 6 Source RGD Symbol Acc 2901
E03	SBR1209536	ENSRNOT00000071926.1	Lep	ENSRNOG0000045797	leptin Source RGD Symbol Acc 3000
E04	SBR1194892	ENSRNOT00000085349.1	Lipc	ENSRNOG0000060338	lipase C, hepatic type Source RGD Symbol Acc 3009
E05	SBR1197775	ENSRNOT00000016543.3	Lpl	ENSRNOG0000012181	lipoprotein lipase Source RGD Symbol Acc 3017
E06	SBR1120605	ENSRNOT00000022679.6	Mmp2	ENSRNOG0000016695	matrix metallopeptidase 2 Source RGD Symbol Acc 621316
E07	SBR1206750	ENSRNOT00000023965.3	Mmp9	ENSRNOG0000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
E08	SBR1157040	ENSRNOT00000066810.3	Nos1	ENSRNOG0000001130	nitric oxide synthase 1 Source RGD Symbol Acc 3184
E09	SBR1203756	ENSRNOT00000013058.4	Nos3	ENSRNOG0000009348	nitric oxide synthase 3 Source RGD Symbol Acc 3186
E10	SBR1165120	ENSRNOT00000080352.1	Plg	ENSRNOG0000017223	plasminogen Source RGD Symbol Acc 619893
E11	SBR1161072	ENSRNOT00000011823.6	Pon1	ENSRNOG0000008902	paraoxonase 1 Source RGD Symbol Acc 620062
E12	SBR1110309	ENSRNOT00000064603.1	Rho	ENSRNOG0000011144	rhodopsin Source RGD Symbol Acc 3573
F01	SBR1152582	ENSRNOT00000022962.6	Rlbp1	ENSRNOG0000016897	retinaldehyde binding protein 1 Source RGD Symbol Acc 1309649
F02	SBR1209123	ENSRNOT00000078187.1	Rpe65	ENSRNOG0000009582	RPE65, retinoid isomerohydrolase Source RGD Symbol Acc 621396
F03	SBR1175880	ENSRNOT00000085770.1	Sag	ENSRNOG0000018185	S-antigen visual arrestin Source RGD Symbol Acc 3619
F04	SBR1172884	ENSRNOT00000001299.7	Scarb1	ENSRNOG0000000981	scavenger receptor class B, member 1 Source RGD Symbol Acc 2302
F05	SBR1126485	ENSRNOT00000001916.2	Serpine1	ENSRNOG000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F06	SBR1135458	ENSRNOT00000004313.5	Serpinf1	ENSRNOG0000003172	serpin family F member 1 Source RGD Symbol Acc 631369
F07	SBR1216411	ENSRNOT00000009817.4	Serping1	ENSRNOG0000007457	serpin family G member 1 Source RGD Symbol Acc 735225
F08	SBR1153895	ENSRNOT00000028445.6	Slc4a1	ENSRNOG0000020951	solute carrier family 4 member 1 Source RGD Symbol Acc 3710
F09	SBR1204773	ENSRNOT00000025794.4	Sod2	ENSRNOG0000019048	superoxide dismutase 2 Source RGD Symbol Acc 3732
F10	SBR1136268	ENSRNOT00000017486.7	Sparc	ENSRNOG0000012840	secreted protein acidic and cysteine rich Source RGD Symbol Acc 3742

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1151756	ENSRNOT00000022574.5	Stmn1	ENSRNOG0000016810	stathmin 1 Source RGD Symbol Acc 2992
F12	SBR1108544	ENSRNOT00000012725.8	Tf	ENSRNOG0000030625	transferrin Source RGD Symbol Acc 3845
G01	SBR1143485	ENSRNOT00000028051.4	Tgfb1	ENSRNOG0000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G02	SBR1134727	ENSRNOT00000008685.3	Thy1	ENSRNOG0000006604	Thy-1 cell surface antigen Source RGD Symbol Acc 3860
G03	SBR1154276	ENSRNOT00000013745.7	Timp1	ENSRNOG0000010208	TIMP metalloproteinase inhibitor 1 Source RGD Symbol Acc 621675
G04	SBR1140756	ENSRNOT00000005746.5	Timp3	ENSRNOG0000004303	TIMP metalloproteinase inhibitor 3 Source RGD Symbol Acc 3865
G05	SBR1119614	ENSRNOT00000035781.5	Tlr3	ENSRNOG0000021726	toll-like receptor 3 Source RGD Symbol Acc 735171
G06	SBR1180108	ENSRNOT00000014020.3	Tlr4	ENSRNOG0000010522	toll-like receptor 4 Source RGD Symbol Acc 3870
G07	SBR1176191	ENSRNOT00000083229.1	Tnmd	ENSRNOG0000060970	tenomodulin Source RGD Symbol Acc 620938
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	SBR1213919	ENSRNOT00000035814.3	Vldlr	ENSRNOG0000027491	very low density lipoprotein receptor Source RGD Symbol Acc 3963
G11	SBR1184358	ENSRNOT00000039954.5	Vtn	ENSRNOG0000010031	vitronectin Source RGD Symbol Acc 3967
G12	SBR1124386	ENSRNOT00000026643.7	Vwf	ENSRNOG0000019689	von Willebrand factor Source RGD Symbol Acc 621759
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 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 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.