

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

Mouse Nephrotoxicity

Cat. no. 249950 SBMM-094ZR

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	A2m	Aass	Abcb1a	Abcc2	Aldh1a1	Angptl4	Anxa5	Atf3	Bhmt	Bmp1	Bmp4	Btg2
B	Calb1	Cat	Ccl3	Ccnd1	Ccng1	Ccs	Cd24a	Cd44	Cdkn1a	Clu	Cp	Cst3
C	Cts	Cxcl10	Cxcl3	Cyp2c54	Cyp2d22	Ccn1	Egf	Fgb	Fmo2	Fn1	G6pc	G6pdx
D	Gadd45a	Gamt	Gatm	Gc	Ghr	Glul	Gprmb	Gpx8	Gstk1	Gstp1	Havcr1	Hmox1
E	Hmox2	Hsp90aa1	Idh1	Igf1bp1	Igf1bp3	Ipmk	Klk1	Lcn2	Lgals3	Mcm6	Mgp	Mt1
F	Nox4	Nphs2	Nqo1	Oat	Odc1	Rgn	Rtn4	Scd1	Slc22a1	Slc22a5	Slc22a6	Socs3
G	Sod2	Sod3	Spp1	Sprr1a	Timp1	Tmsb10	Tnfrsf12a	Uchl1	Ugt1a1	Ugt1a6a	Vcam1	Vim
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM1038708	ENSMUST00000032203.8	A2m	ENSMUSG0000030111	alpha-2-macroglobulin Source MGI Symbol Acc MGI 2449119
A02	SBM0902788	ENSMUST00000138063.1	Aass	ENSMUSG0000029695	aminoadipate-semialdehyde synthase Source MGI Symbol Acc MGI 1353573
A03	SBM1065613	ENSMUST00000126846.1	Abcb1a	ENSMUSG0000040584	ATP-binding cassette, sub-family B (MDR/TAP), member 1A Source MGI Symbol Acc MGI 97570
A04	SBM1002449	ENSMUST00000026208.5	Abcc2	ENSMUSG0000025194	ATP-binding cassette, sub-family C (CFTR/MRP), member 2 Source MGI Symbol Acc MGI 1352447
A05	SBM0801506	ENSMUST00000225337.2	Aldh1a1	ENSMUSG0000053279	aldehyde dehydrogenase family 1, subfamily A1 Source MGI Symbol Acc MGI 1353450
A06	SBM0692606	ENSMUST00000174872.1	Angptl4	ENSMUSG0000002289	angiopoietin-like 4 Source MGI Symbol Acc MGI 1888999
A07	SBM1073515	ENSMUST00000199478.1	Anxa5	ENSMUSG0000027712	annexin A5 Source MGI Symbol Acc MGI 106008
A08	SBM0766362	ENSMUST00000131854.1	Atf3	ENSMUSG0000026628	activating transcription factor 3 Source MGI Symbol Acc MGI 109384
A09	SBM0965281	ENSMUST00000099309.5	Bhmt	ENSMUSG0000074768	betaine-homocysteine methyltransferase Source MGI Symbol Acc MGI 1339972
A10	SBM1022339	ENSMUST00000022693.8	Bmp1	ENSMUSG0000022098	bone morphogenetic protein 1 Source MGI Symbol Acc MGI 88176
A11	SBM0845886	ENSMUST00000100676.2	Bmp4	ENSMUSG0000021835	bone morphogenetic protein 4 Source MGI Symbol Acc MGI 88180
A12	SBM0925245	ENSMUST00000020692.6	Btg2	ENSMUSG0000020423	B cell translocation gene 2, anti-proliferative Source MGI Symbol Acc MGI 108384
B01	SBM1013033	ENSMUST00000029876.1	Calb1	ENSMUSG0000028222	calbindin 1 Source MGI Symbol Acc MGI 88248
B02	SBM0711514	ENSMUST00000111168.3	Cat	ENSMUSG0000027187	catalase Source MGI Symbol Acc MGI 88271
B03	SBM0794563	ENSMUST00000001008.5	Ccl3	ENSMUSG0000000982	chemokine (C-C motif) ligand 3 Source MGI Symbol Acc MGI 98260
B04	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG0000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B05	SBM0884128	ENSMUST00000020576.7	Ccng1	ENSMUSG0000020326	cyclin G1 Source MGI Symbol Acc MGI 102890
B06	SBM0733239	ENSMUST00000037246.6	Ccs	ENSMUSG0000034108	copper chaperone for superoxide dismutase Source MGI Symbol Acc MGI 1333783
B07	SBM0882434	ENSMUST000000214476.1	Cd24a	ENSMUSG0000047139	CD24a antigen Source MGI Symbol Acc MGI 88323
B08	SBM0860996	ENSMUST00000111194.7	Cd44	ENSMUSG0000005087	CD44 antigen Source MGI Symbol Acc MGI 88338
B09	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG0000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B10	SBM0933901	ENSMUST00000153460.7	Clu	ENSMUSG0000022037	clusterin Source MGI Symbol Acc MGI 88423
B11	SBM0793445	ENSMUST00000091309.11	Cp	ENSMUSG0000003617	ceruloplasmin Source MGI Symbol Acc MGI 88476
B12	SBM0911752	ENSMUST00000144845.1	Cst3	ENSMUSG0000027447	cystatin C Source MGI Symbol Acc MGI 102519
C01	SBM0953672	ENSMUST00000015667.8	Ctss	ENSMUSG0000038642	cathepsin S Source MGI Symbol Acc MGI 107341
C02	SBM0996179	ENSMUST00000118006.2	Cxcl10	ENSMUSG0000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
C03	SBM0747228	ENSMUST00000201840.1	Cxcl3	ENSMUSG0000029379	chemokine (C-X-C motif) ligand 3 Source MGI Symbol Acc MGI 3037818
C04	SBM0684360	ENSMUST00000048959.4	Cyp2c54	ENSMUSG0000067225	cytochrome P450, family 2, subfamily c, polypeptide 54 Source MGI Symbol Acc MGI 3642960
C05	SBM0892868	ENSMUST00000228986.1	Cyp2d22	ENSMUSG0000061740	cytochrome P450, family 2, subfamily d, polypeptide 22 Source MGI Symbol Acc MGI 1929474
C06	SBM0735944	ENSMUST00000029846.4	Ccn1	ENSMUSG0000028195	cellular communication network factor 1 Source MGI Symbol Acc MGI 88613
C07	SBM1005237	ENSMUST00000197079.4	Egf	ENSMUSG0000028017	epidermal growth factor Source MGI Symbol Acc MGI 95290
C08	SBM0789421	ENSMUST00000048246.4	Fgb	ENSMUSG0000033831	fibrinogen beta chain Source MGI Symbol Acc MGI 99501
C09	SBM0841573	ENSMUST00000111510.7	Fmo2	ENSMUSG0000040170	flavin containing monooxygenase 2 Source MGI Symbol Acc MGI 1916776
C10	SBM0934692	ENSMUST00000185408.6	Fn1	ENSMUSG0000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0872131	019469.2	G6pc	000078650	glucose-6-phosphatase, catalytic Source MGI Symbol Acc MGI 95607
C12	SBM1034614	ENSMUST00000135894.1	G6pdx	ENSMUSG0000031400	glucose-6-phosphate dehydrogenase X-linked Source MGI Symbol Acc MGI 105979
D01	SBM0962210	ENSMUST00000151958.1	Gadd45a	ENSMUSG0000036390	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799
D02	SBM0777625	ENSMUST00000148615.1	Gamt	ENSMUSG0000020150	guanidinoacetate methyltransferase Source MGI Symbol Acc MGI 1098221
D03	SBM0722245	ENSMUST00000154598.7	Gatm	ENSMUSG0000027199	glycine amidinotransferase (L-arginine glycine amidinotransferase) Source MGI Symbol Acc MGI 1914342
D04	SBM0998871	ENSMUST00000200534.1	Gc	ENSMUSG0000035540	vitamin D binding protein Source MGI Symbol Acc MGI 95669
D05	SBM0700841	ENSMUST00000110697.8	Ghr	ENSMUSG0000055737	growth hormone receptor Source MGI Symbol Acc MGI 95708
D06	SBM1001480	ENSMUST00000139476.7	Glul	ENSMUSG0000026473	glutamate-ammonia ligase (glutamine synthetase) Source MGI Symbol Acc MGI 95739
D07	SBM1071689	ENSMUST00000204260.1	Gpnmb	ENSMUSG0000029816	glycoprotein (transmembrane) nmb Source MGI Symbol Acc MGI 1934765
D08	SBM1046352	ENSMUST00000231962.1	Gpx8	ENSMUSG0000021760	glutathione peroxidase 8 (putative) Source MGI Symbol Acc MGI 1916840
D09	SBM0975188	ENSMUST00000031897.7	Gstk1	ENSMUSG0000029864	glutathione S-transferase kappa 1 Source MGI Symbol Acc MGI 1923513
D10	SBM1021264	ENSMUST00000237239.1	Gstp1	ENSMUSG0000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
D11	SBM0903865	ENSMUST00000047568.4	Havcr1	ENSMUSG0000040405	hepatitis A virus cellular receptor 1 Source MGI Symbol Acc MGI 2159680
D12	SBM0936413	ENSMUST00000005548.7	Hmox1	ENSMUSG0000005413	heme oxygenase 1 Source MGI Symbol Acc MGI 96163
E01	SBM0826858	ENSMUST00000120232.7	Hmox2	ENSMUSG0000004070	heme oxygenase 2 Source MGI Symbol Acc MGI 109373
E02	SBM0939146	ENSMUST00000155242.7	Hsp90aa1	ENSMUSG0000021270	heat shock protein 90, alpha (cytosolic), class A member 1 Source MGI Symbol Acc MGI 96250
E03	SBM1066582	ENSMUST00000169032.7	Idh1	ENSMUSG0000025950	isocitrate dehydrogenase 1 (NADP+), soluble Source MGI Symbol Acc MGI 96413
E04	SBM0763834	ENSMUST00000020704.7	Igfbp1	ENSMUSG0000020429	insulin-like growth factor binding protein 1 Source MGI Symbol Acc MGI 96436
E05	SBM0693110	ENSMUST00000020702.10	Igfbp3	ENSMUSG0000020427	insulin-like growth factor binding protein 3 Source MGI Symbol Acc MGI 96438
E06	SBM1049495	ENSMUST00000147277.7	Ipmk	ENSMUSG0000060733	inositol polyphosphate multikinase Source MGI Symbol Acc MGI 1916968
E07	SBM0723753	ENSMUST00000075162.4	Klk1	ENSMUSG0000063903	kallikrein 1 Source MGI Symbol Acc MGI 102850
E08	SBM0689303	ENSMUST00000050785.13	Lcn2	ENSMUSG0000026822	lipocalin 2 Source MGI Symbol Acc MGI 96757
E09	SBM0732602	ENSMUST00000146468.3	Lgals3	ENSMUSG0000050335	lectin, galactose binding, soluble 3 Source MGI Symbol Acc MGI 96778
E10	SBM0733610	ENSMUST00000188755.1	Mcm6	ENSMUSG0000026355	minichromosome maintenance complex component 6 Source MGI Symbol Acc MGI 1298227
E11	SBM0715813	ENSMUST00000203103.1	Mgp	ENSMUSG0000030218	matrix Gla protein Source MGI Symbol Acc MGI 96976
E12	SBM0992835	ENSMUST00000211807.1	Mt1	ENSMUSG0000031765	metallothionein 1 Source MGI Symbol Acc MGI 97171
F01	SBM0915544	ENSMUST00000126887.7	Nox4	ENSMUSG0000030562	NADPH oxidase 4 Source MGI Symbol Acc MGI 1354184
F02	SBM0900880	ENSMUST00000193020.1	Nphs2	ENSMUSG0000026602	nephrosis 2, podacin Source MGI Symbol Acc MGI 2157018
F03	SBM0878519	ENSMUST00000003947.8	Nqo1	ENSMUSG0000003849	NAD(P)H dehydrogenase, quinone 1 Source MGI Symbol Acc MGI 103187
F04	SBM0744893	ENSMUST00000084500.7	Oat	ENSMUSG0000030934	ornithine aminotransferase Source MGI Symbol Acc MGI 97394
F05	SBM0976238	ENSMUST00000220947.1	Odc1	ENSMUSG0000011179	ornithine decarboxylase, structural 1 Source MGI Symbol Acc MGI 97402
F06	SBM0961794	ENSMUST00000023832.6	Rgn	ENSMUSG0000023070	regucalcin Source MGI Symbol Acc MGI 108024
F07	SBM0934050	ENSMUST00000156217.7	Rtn4	ENSMUSG0000020458	reticulin 4 Source MGI Symbol Acc MGI 1915835
F08	SBM0890897	ENSMUST00000236824.1	Scd1	ENSMUSG0000037071	stearoyl-Coenzyme A desaturase 1 Source MGI Symbol Acc MGI 98239
F09	SBM0744363	ENSMUST00000233691.1	Slc22a1	ENSMUSG0000023829	solute carrier family 22 (organic cation transporter), member 1 Source MGI Symbol Acc MGI 108111
F10	SBM0772549	ENSMUST00000152084.1	Slc22a5	ENSMUSG0000018900	solute carrier family 22 (organic cation transporter), member 5 Source MGI Symbol Acc MGI 1329012

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0707103	ENSMUST00000010250.3	Slc22a6	ENSMUSG00000024650	solute carrier family 22 (organic anion transporter), member 6 Source MGI Symbol Acc MGI 892001
F12	SBM0977814	ENSMUST00000054002.3	Socs3	ENSMUSG00000053113	suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791
G01	SBM1063571	ENSMUST00000233791.1	Sod2	ENSMUSG00000006818	superoxide dismutase 2, mitochondrial Source MGI Symbol Acc MGI 98352
G02	SBM1072491	ENSMUST00000101208.5	Sod3	ENSMUSG00000072941	superoxide dismutase 3, extracellular Source MGI Symbol Acc MGI 103181
G03	SBM0826950	ENSMUST00000086833.12	Spp1	ENSMUSG00000029304	secreted phosphoprotein 1 Source MGI Symbol Acc MGI 98389
G04	SBM0936076	ENSMUST00000054599.7	Spr1a	ENSMUSG00000050359	small proline-rich protein 1A Source MGI Symbol Acc MGI 106660
G05	SBM0839007	ENSMUST00000115342.9	Timp1	ENSMUSG00000011131	tissue inhibitor of metalloproteinase 1 Source MGI Symbol Acc MGI 98752
G06	SBM0983926	ENSMUST00000114049.1	Tmsb10	ENSMUSG00000079523	thymosin, beta 10 Source MGI Symbol Acc MGI 109146
G07	SBM1083113	ENSMUST00000167059.8	Tnfrsf12a	ENSMUSG00000023905	tumor necrosis factor receptor superfamily, member 12a Source MGI Symbol Acc MGI 1351484
G08	SBM0909454	ENSMUST00000202339.1	Uchl1	ENSMUSG00000029223	ubiquitin carboxy-terminal hydrolase L1 Source MGI Symbol Acc MGI 103149
G09	SBM0868036	ENSMUST00000073049.6	Ugt1a1	ENSMUSG00000089960	UDP glucuronosyltransferase 1 family, polypeptide A1 Source MGI Symbol Acc MGI 98898
G10	SBM1066451	ENSMUST00000014263.5	Ugt1a6a	ENSMUSG00000054545	UDP glucuronosyltransferase 1 family, polypeptide A6A Source MGI Symbol Acc MGI 2137698
G11	SBM1225402	ENSMUST00000029574.12	Vcam1	ENSMUSG00000027962	vascular cell adhesion molecule 1 Source MGI Symbol Acc MGI 98926
G12	SBM0684573	ENSMUST00000028062.7	Vim	ENSMUSG00000026728	vimentin Source MGI Symbol Acc MGI 98932
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	SBM1218554	Sybr_MGDC	MGDC	Sybr_MGDC	Mouse 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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