

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

Mouse Insulin Signaling Pathway

Cat. no. 249950 SBMM-030ZR

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	Acaca	Acox1	Adra1d	Aebp1	Akt1	Akt2	Akt3	Araf	Bcl2l1	Braf	Cap1	Cbl
B	Cebpa	Cebpb	Cfd	Dok1	Dok2	Dok3	Dusp14	Eif2b1	Eif4ebp1	Erc1	Fbp1	Fos
C	Frs2	Frs3	G6pc	G6pc2	Gab1	Gck	Gpd1	Grb10	Grb2	Gsk3b	Hk2	Hras
D	Igf1r	Igf2	Igfbp1	Ins1	Ins3	Irs1	Irs2	Jun	Klf10	Kras	Ldir	Lep
E	Map2k1	Mapk1	Mtor	Nck1	Nos2	Npy	Pck2	Pdk1	Pik3ca	Pik3cb	Pik3r1	Pik3r2
F	Pknox1	Pparg	Ppp1ca	Prkcg	Prkci	Prkcz	Pri	Ptpn1	Ptprf	Raf1	Retn	Rps6ka1
G	Rras	Rras2	Serpine1	Shc1	Slc27a4	Slc2a1	Sorbs1	Sos1	Srebf1	Tg	Ucp1	Vegfa
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	SBM0933576	ENSMUST00000133811.2	Acaca	ENSMUSG0000020532	acetyl-Coenzyme A carboxylase alpha Source MGI Symbol Acc MGI 108451
A02	SBM1069471	ENSMUST00000066587.11	Acox1	ENSMUSG0000020777	acyl-Coenzyme A oxidase 1, palmitoyl Source MGI Symbol Acc MGI 1330812
A03	SBM0697937	ENSMUST00000103184.3	Adra1d	ENSMUSG0000027335	adrenergic receptor, alpha 1d Source MGI Symbol Acc MGI 106673
A04	SBM0724164	ENSMUST00000109829.1	Aebp1	ENSMUSG0000020473	AE binding protein 1 Source MGI Symbol Acc MGI 1197012
A05	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A06	SBM0882867	ENSMUST00000051356.11	Akt2	ENSMUSG0000004056	thymoma viral proto-oncogene 2 Source MGI Symbol Acc MGI 104874
A07	SBM0683049	ENSMUST00000019843.14	Akt3	ENSMUSG0000019699	thymoma viral proto-oncogene 3 Source MGI Symbol Acc MGI 1345147
A08	SBM0848565	ENSMUST00000152955.7	Araf	ENSMUSG0000001127	Araf proto-oncogene, serine/threonine kinase Source MGI Symbol Acc MGI 88065
A09	SBM0751583	ENSMUST00000134357.1	Bcl2l1	ENSMUSG0000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A10	SBM1018224	ENSMUST00000169647.1	Braf	ENSMUSG0000002413	Braf transforming gene Source MGI Symbol Acc MGI 88190
A11	SBM1033810	ENSMUST00000106255.7	Cap1	ENSMUSG0000028656	CAP, adenylate cyclase-associated protein 1 (yeast) Source MGI Symbol Acc MGI 88262
A12	SBM0972680	ENSMUST00000037644.7	Cbl	ENSMUSG0000034342	Casitas B-lineage lymphoma Source MGI Symbol Acc MGI 88279
B01	SBM0970317	ENSMUST00000205391.1	Cebpa	ENSMUSG0000034957	CCAAT/enhancer binding protein (C/EBP), alpha Source MGI Symbol Acc MGI 99480
B02	SBM0682459	ENSMUST00000070642.3	Cebpb	ENSMUSG0000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
B03	SBM0729233	ENSMUST00000061653.8	Cfd	ENSMUSG0000061780	complement factor D (adipsin) Source MGI Symbol Acc MGI 87931
B04	SBM0785101	ENSMUST00000204900.1	Dok1	ENSMUSG0000068335	docking protein 1 Source MGI Symbol Acc MGI 893587
B05	SBM0890382	ENSMUST00000171481.1	Dok2	ENSMUSG0000022102	docking protein 2 Source MGI Symbol Acc MGI 1332623
B06	SBM0966847	ENSMUST00000047877.4	Dok3	ENSMUSG0000035711	docking protein 3 Source MGI Symbol Acc MGI 1351490
B07	SBM0955098	ENSMUST00000018792.11	Dusp14	ENSMUSG0000018648	dual specificity phosphatase 14 Source MGI Symbol Acc MGI 1927168
B08	SBM1011200	ENSMUST00000135361.7	Eif2b1	ENSMUSG0000029388	eukaryotic translation initiation factor 2B, subunit 1 (alpha) Source MGI Symbol Acc MGI 2384802
B09	SBM1066112	ENSMUST00000033880.6	Eif4ebp1	ENSMUSG0000031490	eukaryotic translation initiation factor 4E binding protein 1 Source MGI Symbol Acc MGI 103267
B10	SBM0942819	ENSMUST00000003645.8	Erc1	ENSMUSG0000003549	excision repair cross-complementing rodent repair deficiency, complementation group 1 Source MGI Symbol Acc MGI 95412
B11	SBM0968769	ENSMUST00000092888.10	Fbp1	ENSMUSG0000069805	fructose bisphosphatase 1 Source MGI Symbol Acc MGI 95492
B12	SBM0977461	ENSMUST00000134311.1	Fos	ENSMUSG0000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C01	SBM1093442	ENSMUST00000219483.1	Frs2	ENSMUSG0000020170	fibroblast growth factor receptor substrate 2 Source MGI Symbol Acc MGI 1100860
C02	SBM1066068	ENSMUST00000113296.7	Frs3	ENSMUSG0000023266	fibroblast growth factor receptor substrate 3 Source MGI Symbol Acc MGI 2135965
C03	SBM0872131	ENSMUST00000019469.2	G6pc	ENSMUSG0000078650	glucose-6-phosphatase, catalytic Source MGI Symbol Acc MGI 95607
C04	SBM0977596	ENSMUST00000112317.2	G6pc2	ENSMUSG0000005232	glucose-6-phosphatase, catalytic, 2 Source MGI Symbol Acc MGI 1277193
C05	SBM0848661	ENSMUST00000210676.1	Gab1	ENSMUSG0000031714	growth factor receptor bound protein 2-associated protein 1 Source MGI Symbol Acc MGI 108088
C06	SBM1029217	ENSMUST00000109822.7	Gck	ENSMUSG0000041798	glucokinase Source MGI Symbol Acc MGI 1270854
C07	SBM0849967	ENSMUST00000161768.1	Gpd1	ENSMUSG0000023019	glycerol-3-phosphate dehydrogenase 1 (soluble) Source MGI Symbol Acc MGI 95679
C08	SBM0853557	ENSMUST00000109653.7	Grb10	ENSMUSG0000020176	growth factor receptor bound protein 10 Source MGI Symbol Acc MGI 103232
C09	SBM1054562	ENSMUST00000106497.7	Grb2	ENSMUSG0000059923	growth factor receptor bound protein 2 Source MGI Symbol Acc MGI 95805
C10	SBM0862470	ENSMUST00000132057.1	Gsk3b	ENSMUSG0000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
		ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1068583	000642.10	Hk2	000000628	hexokinase 2 Source MGI Symbol Acc MGI 1315197
C12	SBM0815785	ENSMUST00000097957.10	Hras	ENSMUSG0000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
D01	SBM0769269	ENSMUST00000207621.1	Igf1r	ENSMUSG0000005533	insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433
D02	SBM0905480	ENSMUST00000121128.7	Igf2	ENSMUSG0000048583	insulin-like growth factor 2 Source MGI Symbol Acc MGI 96434
D03	SBM0763834	ENSMUST0000020704.7	Igfbp1	ENSMUSG0000020429	insulin-like growth factor binding protein 1 Source MGI Symbol Acc MGI 96436
D04	SBM0872440	ENSMUST00000039652.5	Ins1	ENSMUSG0000035804	insulin I Source MGI Symbol Acc MGI 96572
D05	SBM1065189	ENSMUST00000034261.7	InsI3	ENSMUSG0000079019	insulin-like 3 Source MGI Symbol Acc MGI 108427
D06	SBM0923271	ENSMUST00000069799.2	Irs1	ENSMUSG0000055980	insulin receptor substrate 1 Source MGI Symbol Acc MGI 99454
D07	SBM0792647	ENSMUST00000040514.7	Irs2	ENSMUSG0000038894	insulin receptor substrate 2 Source MGI Symbol Acc MGI 109334
D08	SBM1045409	ENSMUST00000107094.1	Jun	ENSMUSG0000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D09	SBM1054966	ENSMUST00000074043.6	Klf10	ENSMUSG0000037465	Kruppel-like factor 10 Source MGI Symbol Acc MGI 1101353
D10	SBM1059793	ENSMUST00000203147.2	Kras	ENSMUSG0000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
D11	SBM0960715	ENSMUST00000217111.1	Ldlr	ENSMUSG0000032193	low density lipoprotein receptor Source MGI Symbol Acc MGI 96765
D12	SBM0718370	ENSMUST00000169505.1	Lep	ENSMUSG0000059201	leptin Source MGI Symbol Acc MGI 104663
E01	SBM1025120	ENSMUST00000005066.8	Map2k1	ENSMUSG0000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
E02	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG0000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E03	SBM1220565	ENSMUST00000103221.9	Mtor	ENSMUSG0000028991	mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394
E04	SBM0730618	ENSMUST00000188670.1	Nck1	ENSMUSG0000032475	non-catalytic region of tyrosine kinase adaptor protein 1 Source MGI Symbol Acc MGI 109601
E05	SBM0835086	ENSMUST00000208783.1	Nos2	ENSMUSG0000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
E06	SBM0865432	ENSMUST00000031843.6	Npy	ENSMUSG0000029819	neuropeptide Y Source MGI Symbol Acc MGI 97374
E07	SBM1060112	ENSMUST00000228921.1	Pck2	ENSMUSG0000040618	phosphoenolpyruvate carboxykinase 2 (mitochondrial) Source MGI Symbol Acc MGI 1860456
E08	SBM0716432	ENSMUST00000115409.8	Pdpk1	ENSMUSG0000024122	3-phosphoinositide dependent protein kinase 1 Source MGI Symbol Acc MGI 1338068
E09	SBM0905151	ENSMUST00000108243.7	Pik3ca	ENSMUSG0000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
E10	SBM1012041	ENSMUST00000124723.1	Pik3cb	ENSMUSG0000032462	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta Source MGI Symbol Acc MGI 1922019
E11	SBM0805909	ENSMUST00000035532.12	Pik3r1	ENSMUSG0000041417	phosphoinositide-3-kinase regulatory subunit 1 Source MGI Symbol Acc MGI 97583
E12	SBM0859782	ENSMUST00000154685.1	Pik3r2	ENSMUSG0000031834	phosphoinositide-3-kinase regulatory subunit 2 Source MGI Symbol Acc MGI 1098772
F01	SBM0893001	ENSMUST00000127058.1	Pklr	ENSMUSG0000041237	pyruvate kinase liver and red blood cell Source MGI Symbol Acc MGI 97604
F02	SBM1015614	ENSMUST00000205213.2	Pparg	ENSMUSG0000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F03	SBM0679454	ENSMUST00000046094.5	Ppp1ca	ENSMUSG0000040385	protein phosphatase 1 catalytic subunit alpha Source MGI Symbol Acc MGI 103016
F04	SBM1062071	ENSMUST00000100301.10	Prkcg	ENSMUSG0000078816	protein kinase C, gamma Source MGI Symbol Acc MGI 97597
F05	SBM0705298	ENSMUST00000108249.8	Prkci	ENSMUSG0000037643	protein kinase C, iota Source MGI Symbol Acc MGI 99260
F06	SBM0723762	ENSMUST00000139647.7	Prkcz	ENSMUSG0000029053	protein kinase C, zeta Source MGI Symbol Acc MGI 97602
F07	SBM0899700	ENSMUST00000110369.9	Prl	ENSMUSG0000021342	prolactin Source MGI Symbol Acc MGI 97762
F08	SBM0939941	ENSMUST00000142717.1	Ptfn1	ENSMUSG0000027540	protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805
F09	SBM1018909	ENSMUST00000123484.1	Ptprf	ENSMUSG0000033295	protein tyrosine phosphatase, receptor type, F Source MGI Symbol Acc MGI 102695
F10	SBM0974573	ENSMUST00000124553.3	Raf1	ENSMUSG0000000441	v-raf-leukemia viral oncogene 1 Source MGI Symbol Acc MGI 97847

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0984170	ENSMUST00000012849.14	Retn	ENSMUSG0000012705	resistin Source MGI Symbol Acc MGI 1888506
F12	SBM0679686	ENSMUST00000105894.10	Rps6ka1	ENSMUSG0000003644	ribosomal protein S6 kinase polypeptide 1 Source MGI Symbol Acc MGI 104558
G01	SBM0942809	ENSMUST00000044111.9	Rras	ENSMUSG0000038387	related RAS viral (r-ras) oncogene Source MGI Symbol Acc MGI 98179
G02	SBM0750217	ENSMUST00000210075.1	Rras2	ENSMUSG0000055723	related RAS viral (r-ras) oncogene 2 Source MGI Symbol Acc MGI 1914172
G03	SBM0809699	ENSMUST00000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G04	SBM0684894	ENSMUST00000128238.7	Shc1	ENSMUSG0000042626	src homology 2 domain-containing transforming protein C1 Source MGI Symbol Acc MGI 98296
G05	SBM0823234	ENSMUST00000136444.1	Slc27a4	ENSMUSG0000059316	solute carrier family 27 (fatty acid transporter), member 4 Source MGI Symbol Acc MGI 1347347
G06	SBM1008931	ENSMUST00000144329.7	Slc2a1	ENSMUSG0000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
G07	SBM1083181	ENSMUST00000224667.1	Sorbs1	ENSMUSG0000025006	sorbin and SH3 domain containing 1 Source MGI Symbol Acc MGI 700014
G08	SBM0687483	ENSMUST00000234841.1	Sos1	ENSMUSG0000024241	SOS Ras/Rac guanine nucleotide exchange factor 1 Source MGI Symbol Acc MGI 98354
G09	SBM0984070	ENSMUST00000020846.7	Srebf1	ENSMUSG0000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G10	SBM0962912	ENSMUST00000166403.1	Tg	ENSMUSG0000053469	thyroglobulin Source MGI Symbol Acc MGI 98733
G11	SBM1037476	ENSMUST00000034146.4	Ucp1	ENSMUSG0000031710	uncoupling protein 1 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 98894
G12	SBM1079198	ENSMUST00000217017.1	Vegfa	ENSMUSG0000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	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 μ l reactions: 20 μ l 8x gDNA Removal Mix, 10 μ l Reverse Transcription Enzyme, 40 μ l Reverse Transcription Mix (containing RT primers), 20 μ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova SYBR Green RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 μ l QuantiNova SYBR Green RT Mix, 20 μ l Internal Control RNA, 500 μ l Yellow Template Dilution Buffer, 250 μ l ROX Reference Dye, 1.9 μ l RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ 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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