

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

Mouse Insulin Signaling Pathway

Cat. no. 249955 UPMM-030ZA

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA Probe PCR Focus Panels are shipped at room temperature. Immediately upon receipt, they should be stored protected from light 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 Probe PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova Probe PCR Kit (Mastermix) for PCR.

Panel layout (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. Refer to the QuantiNova LNA Probe PCR 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	KIF10	Kras	Ldlr	Lep
E	Map2k1	Mapk1	Mtor	Nck1	Nos2	Npy	Pck2	Pdjk1	Pik3ca	Pik3cb	Pik3r1	Pik3r2
F	Pikr	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 Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM094854 9	ENSMUST00000 130012.8	Acaca	ENSMUSG00 000020532	acetyl-Coenzyme A carboxylase alpha Source MGI Symbol Acc MGI 108451
A02	UPFM092748 8	ENSMUST00000 066587.11	Acox1	ENSMUSG00 000020777	acyl-Coenzyme A oxidase 1, palmitoyl Source MGI Symbol Acc MGI 1330812
A03	UPFM067017 8	ENSMUST00000 103184.3	Adra1d	ENSMUSG00 000027335	adrenergic receptor, alpha 1d Source MGI Symbol Acc MGI 106673
A04	UPFM100794 5	ENSMUST00000 109829.1	Aebp1	ENSMUSG00 000020473	AE binding protein 1 Source MGI Symbol Acc MGI 1197012
A05	UPFM082786 0	ENSMUST00000 139388.2	Akt1	ENSMUSG00 000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A06	UPFM074464 2	ENSMUST00000 138459.7	Akt2	ENSMUSG00 000004056	thymoma viral proto-oncogene 2 Source MGI Symbol Acc MGI 104874
A07	UPFM085236 9	ENSMUST00000 111160.8	Akt3	ENSMUSG00 000019699	thymoma viral proto-oncogene 3 Source MGI Symbol Acc MGI 1345147
A08	UPFM068506 5	ENSMUST00000 120356.7	Araf	ENSMUSG00 000001127	Araf proto-oncogene, serine/threonine kinase Source MGI Symbol Acc MGI 88065
A09	UPFM066341 1	ENSMUST00000 156688.1	Bcl2l1	ENSMUSG00 000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A10	UPFM069974 6	ENSMUST00000 002487.14	Braf	ENSMUSG00 000002413	Braf transforming gene Source MGI Symbol Acc MGI 88190
A11	UPFM068450 6	ENSMUST00000 106257.9	Cap1	ENSMUSG00 000028656	CAP, adenylate cyclase-associated protein 1 (yeast) Source MGI Symbol Acc MGI 88262
A12	UPFM082124 9	ENSMUST00000 206147.1	Cbl	ENSMUSG00 000034342	Casitas B-lineage lymphoma Source MGI Symbol Acc MGI 88279
B01	UPFM099260 7	ENSMUST00000 042985.10	Cebpa	ENSMUSG00 000034957	CCAAT/enhancer binding protein (C/EBP), alpha Source MGI Symbol Acc MGI 99480
B02	UPFM117294 0	ENSMUST00000 070642.3	Cebpb	ENSMUSG00 000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
B03	UPFM081054 5	ENSMUST00000 217837.1	Cfd	ENSMUSG00 000061780	complement factor D (adipsin) Source MGI Symbol Acc MGI 87931
B04	UPFM093830 4	ENSMUST00000 204900.1	Dok1	ENSMUSG00 000068335	docking protein 1 Source MGI Symbol Acc MGI 893587
B05	UPFM073346 9	ENSMUST00000 164691.1	Dok2	ENSMUSG00 000022102	docking protein 2 Source MGI Symbol Acc MGI 1332623
B06	UPFM072234 5	ENSMUST00000 047877.4	Dok3	ENSMUSG00 000035711	docking protein 3 Source MGI Symbol Acc MGI 1351490
B07	UPFM100570 8	ENSMUST00000 018792.11	Dusp14	ENSMUSG00 000018648	dual specificity phosphatase 14 Source MGI Symbol Acc MGI 1927168
B08	UPFM076505 4	ENSMUST00000 135361.7	Eif2b1	ENSMUSG00 000029388	eukaryotic translation initiation factor 2B, subunit 1 (alpha) Source MGI Symbol Acc MGI 2384802
B09	UPFM094083 8	ENSMUST00000 210959.1	Eif4ebp1	ENSMUSG00 000031490	eukaryotic translation initiation factor 4E binding protein 1 Source MGI Symbol Acc MGI 103267
B10	UPFM083835 0	ENSMUST00000 160909.1	Erc1	ENSMUSG00 000003549	excision repair cross-complementing rodent repair deficiency, complementation group 1 Source MGI Symbol Acc MGI 95412
B11	UPFM072819 2	ENSMUST00000 150013.1	Fbp1	ENSMUSG00 000069805	fructose bisphosphatase 1 Source MGI Symbol Acc MGI 95492
B12	UPFM076456 3	ENSMUST00000 136122.7	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C01	UPFM070278 8	ENSMUST00000 218868.1	Frs2	ENSMUSG00 000020170	fibroblast growth factor receptor substrate 2 Source MGI Symbol Acc MGI 1100860
C02	UPFM065996 7	ENSMUST00000 113296.7	Frs3	ENSMUSG00 000023266	fibroblast growth factor receptor substrate 3 Source MGI Symbol Acc MGI 2135965
C03	UPFM069116 4	ENSMUST00000 019469.2	G6pc	ENSMUSG00 000078650	glucose-6-phosphatase, catalytic Source MGI Symbol Acc MGI 95607
C04	UPFM064867 3	ENSMUST00000 112317.2	G6pc2	ENSMUSG00 000005232	glucose-6-phosphatase, catalytic, 2 Source MGI Symbol Acc MGI 1277193
C05	UPFM070352 0	ENSMUST00000 034150.9	Gab1	ENSMUSG00 000031714	growth factor receptor bound protein 2-associated protein 1 Source MGI Symbol Acc MGI 108088
C06	UPFM080014 1	ENSMUST00000 109823.8	Gck	ENSMUSG00 000041798	glucokinase Source MGI Symbol Acc MGI 1270854
C07	UPFM084379 3	ENSMUST00000 162194.1	Gpd1	ENSMUSG00 000023019	glycerol-3-phosphate dehydrogenase 1 (soluble) Source MGI Symbol Acc MGI 95679
C08	UPFM083067 8	ENSMUST00000 109653.7	Grb10	ENSMUSG00 000020176	growth factor receptor bound protein 10 Source MGI Symbol Acc MGI 103232
C09	UPFM076228 3	ENSMUST00000 135065.1	Grb2	ENSMUSG00 000059923	growth factor receptor bound protein 2 Source MGI Symbol Acc MGI 95805
C10	UPFM098687 7	ENSMUST00000 114750.1	Gsk3b	ENSMUSG00 000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
	UPFM074256	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	7	000642.10	Hk2	000000628	hexokinase 2 Source MGI Symbol Acc MGI 1315197
C12	UPFM099623 4	ENSMUST00000 124314.2	Hras	ENSMUSG00 000025499	Harvey rat sarcoma virus oncogene Source MGI Symbol Acc MGI 96224
D01	UPFM065329 9	ENSMUST00000 208871.1	Igf1r	ENSMUSG00 000005533	insulin-like growth factor I receptor Source MGI Symbol Acc MGI 96433
D02	UPFM080008 1	ENSMUST00000 000033.11	Igf2	ENSMUSG00 000048583	insulin-like growth factor 2 Source MGI Symbol Acc MGI 96434
D03	UPFM064388 5	ENSMUST00000 020704.7	Igfbp1	ENSMUSG00 000020429	insulin-like growth factor binding protein 1 Source MGI Symbol Acc MGI 96436
D04	UPFM086188 0	ENSMUST00000 039652.5	Ins1	ENSMUSG00 000035804	insulin I Source MGI Symbol Acc MGI 96572
D05	UPFM071077 9	ENSMUST00000 034261.7	InsI3	ENSMUSG00 000079019	insulin-like 3 Source MGI Symbol Acc MGI 108427
D06	UPFM068140 3	ENSMUST00000 069799.2	Irs1	ENSMUSG00 000055980	insulin receptor substrate 1 Source MGI Symbol Acc MGI 99454
D07	UPFM078114 6	ENSMUST00000 040514.7	Irs2	ENSMUSG00 000038894	insulin receptor substrate 2 Source MGI Symbol Acc MGI 109334
D08	UPFM097521 6	ENSMUST00000 107094.1	Jun	ENSMUSG00 000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D09	UPFM094235 0	ENSMUST00000 074043.6	Klf10	ENSMUSG00 000037465	Kruppel-like factor 10 Source MGI Symbol Acc MGI 1101353
D10	UPFM100079 9	ENSMUST00000 032399.11	Kras	ENSMUSG00 000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
D11	UPFM073255 6	ENSMUST00000 034713.8	Ldlr	ENSMUSG00 000032193	low density lipoprotein receptor Source MGI Symbol Acc MGI 96765
D12	UPFM068614 7	ENSMUST00000 169505.1	Lep	ENSMUSG00 000059201	leptin Source MGI Symbol Acc MGI 104663
E01	UPFM066592 5	ENSMUST00000 005066.8	Map2k1	ENSMUSG00 000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
E02	UPFM066625 9	ENSMUST00000 232611.1	Mapk1	ENSMUSG00 000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E03	UPFM062102 3	ENSMUST00000 057580.7	Mtor	ENSMUSG00 000028991	mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394
E04	UPFM093021 5	ENSMUST00000 112874.3	Nck1	ENSMUSG00 000032475	non-catalytic region of tyrosine kinase adaptor protein 1 Source MGI Symbol Acc MGI 109601
E05	UPFM076964 2	ENSMUST00000 208783.1	Nos2	ENSMUSG00 000020826	nitric oxide synthase 2, inducible Source MGI Symbol Acc MGI 97361
E06	UPFM082608 4	ENSMUST00000 031843.6	Npy	ENSMUSG00 000029819	neuropeptide Y Source MGI Symbol Acc MGI 97374
E07	UPFM100687 4	ENSMUST00000 226231.1	Pck2	ENSMUSG00 000040618	phosphoenolpyruvate carboxykinase 2 (mitochondrial) Source MGI Symbol Acc MGI 1860456
E08	UPFM086863 3	ENSMUST00000 052462.12	Pdpk1	ENSMUSG00 000024122	3-phosphoinositide dependent protein kinase 1 Source MGI Symbol Acc MGI 1338068
E09	UPFM070843 8	ENSMUST00000 108243.7	Pik3ca	ENSMUSG00 000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
E10	UPFM092638 8	ENSMUST00000 035037.13	Pik3cb	ENSMUSG00 000032462	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta Source MGI Symbol Acc MGI 1922019
E11	UPFM073586 5	ENSMUST00000 185795.1	Pik3r1	ENSMUSG00 000041417	phosphoinositide-3-kinase regulatory subunit 1 Source MGI Symbol Acc MGI 97583
E12	UPFM100002 8	ENSMUST00000 034296.14	Pik3r2	ENSMUSG00 000031834	phosphoinositide-3-kinase regulatory subunit 2 Source MGI Symbol Acc MGI 1098772
F01	UPFM096059 1	ENSMUST00000 047111.12	Pklr	ENSMUSG00 000041237	pyruvate kinase liver and red blood cell Source MGI Symbol Acc MGI 97604
F02	UPFM084296 6	ENSMUST00000 203732.2	Pparg	ENSMUSG00 000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F03	UPFM078570 9	ENSMUST00000 236181.1	Ppp1ca	ENSMUSG00 000040385	protein phosphatase 1 catalytic subunit alpha Source MGI Symbol Acc MGI 103016
F04	UPFM065985 0	ENSMUST00000 100301.10	Prkcg	ENSMUSG00 000078816	protein kinase C, gamma Source MGI Symbol Acc MGI 97597
F05	UPFM068549 4	ENSMUST00000 130238.1	Prkci	ENSMUSG00 000037643	protein kinase C, iota Source MGI Symbol Acc MGI 99260
F06	UPFM080960 6	ENSMUST00000 105624.1	Prkcz	ENSMUSG00 000029053	protein kinase C, zeta Source MGI Symbol Acc MGI 97602
F07	UPFM097611 3	ENSMUST00000 110369.9	Prl	ENSMUSG00 000021342	prolactin Source MGI Symbol Acc MGI 97762
F08	UPFM096458 5	ENSMUST00000 147210.7	Ptpn1	ENSMUSG00 000027540	protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805
F09	UPFM089174 9	ENSMUST00000 150096.7	Ptpnf	ENSMUSG00 000033295	protein tyrosine phosphatase, receptor type, F Source MGI Symbol Acc MGI 102695
F10	UPFM071074 7	ENSMUST00000 204512.1	Raf1	ENSMUSG00 000000441	v-raf-leukemia viral oncogene 1 Source MGI Symbol Acc MGI 97847

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM080373 5	ENSMUST00000 012849.14	Retn	ENSMUSG00 000012705	resistin Source MGI Symbol Acc MGI 1888506
F12	UPFM087963 3	ENSMUST00000 105894.10	Rps6ka1	ENSMUSG00 000003644	ribosomal protein S6 kinase polypeptide 1 Source MGI Symbol Acc MGI 104558
G01	UPFM071992 8	ENSMUST00000 210397.1	Rras	ENSMUSG00 000038387	related RAS viral (r-ras) oncogene Source MGI Symbol Acc MGI 98179
G02	UPFM066474 4	ENSMUST00000 069449.6	Rras2	ENSMUSG00 000055723	related RAS viral (r-ras) oncogene 2 Source MGI Symbol Acc MGI 1914172
G03	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
G04	UPFM096186 8	ENSMUST00000 154791.7	Shc1	ENSMUSG00 000042626	src homology 2 domain-containing transforming protein C1 Source MGI Symbol Acc MGI 98296
G05	UPFM091509 2	ENSMUST00000 080065.2	Slc27a4	ENSMUSG00 000059316	solute carrier family 27 (fatty acid transporter), member 4 Source MGI Symbol Acc MGI 1347347
G06	UPFM099940 7	ENSMUST00000 208090.1	Slc2a1	ENSMUSG00 000028645	solute carrier family 2 (facilitated glucose transporter), member 1 Source MGI Symbol Acc MGI 95755
G07	UPFM099748 3	ENSMUST00000 225786.1	Sorbs1	ENSMUSG00 000025006	sorbin and SH3 domain containing 1 Source MGI Symbol Acc MGI 700014
G08	UPFM097736 8	ENSMUST00000 068714.6	Sos1	ENSMUSG00 000024241	SOS Ras/Rac guanine nucleotide exchange factor 1 Source MGI Symbol Acc MGI 98354
G09	UPFM063110 3	ENSMUST00000 149238.1	Srebf1	ENSMUSG00 000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G10	UPFM070338 7	ENSMUST00000 171045.8	Tg	ENSMUSG00 000053469	thyroglobulin Source MGI Symbol Acc MGI 98733
G11	UPFM095120 9	ENSMUST00000 034146.4	Ucp1	ENSMUSG00 000031710	uncoupling protein 1 (mitochondrial, proton carrier) Source MGI Symbol Acc MGI 98894
G12	UPFM117296 6	ENSMUST00000 214739.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
H01	UPFM113294 6	ENSMUST00000 163829.1	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	UPFM113294 7	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	UPFM113294 8	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	UPFM113294 9	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	UPFM113295 0	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	UPFM112660 9	UPL_MGDC	MGDC	UPL_MGDC	Mouse Genomic DNA Contamination
H07	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H08	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H09	UPFH1126606	UPL_QIC	QIC	UPL_QIC	QuantiNova Internal Control
H10	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H11	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control
H12	UPFH1126605	UPL_PPC	PPC	UPL_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA Probe PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA Probe PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249945
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 Probe RT-PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 μ l QuantiNova Probe 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	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 μ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 μ l QuantiNova Yellow Template Dilution Buffer, 250 μ l QN ROX Reference Dye, 1.9 ml Water	208252

*Larger kit sizes available.

The QuantiNova LNA Probe 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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