

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

## Mouse Transcription Factors

Cat. no. 249955 UPMM-075ZR

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 (Rotor-Gene): QuantiNova LNA Probe 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 Probe PCR Handbook at [www.qiagen.com](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Ar	Arnt	Aif1	Aif2	Aif3	Aif4	Cebpa	Cebpb	Cebpg	Clasrp	Creb1	Crebbp
B	Cttnb1	Dr1	E2f1	E2f6	Egr1	Esr1	Ets1	Ets2	Fos	Foxa2	Foxg1	Gata1
C	Gata2	Gata3	Gli1	Gli2b	Gli2f1	Hand1	Hand2	Hdac1	Hif1a	Hnf1a	Hnf4a	Hoxa5
D	Hsf1	Id1	Irf1	Jun	Junb	Jund	Kcnn8	Max	Mef2a	Mef2b	Mef2c	Myc
E	Myf5	Myod1	Nanos2	Nfat5	Nfatc2	Nfatc3	Nfatc4	Nrkb1	Nfyb	Nr3c1	Pax6	Pou2f1
F	Ppara	Pparg	Rb1	Rel	Rela	Smad1	Smad4	Smad5	Smad9	Sp1	Sp3	Stat1
G	Stat2	Stat3	Stat4	Stat5a	Stat5b	Stat6	Tbp	Tcf7l2	Tfap2a	Tgif1	Trp53	Yy1
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	QIC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFM078422 2	ENSMUST00000 052837.8	Ar	ENSMUSG00 000046532	androgen receptor Source MGI Symbol Acc MGI 88064
A02	UPFM084244 6	ENSMUST00000 156653.7	Arnt	ENSMUSG00 000015522	aryl hydrocarbon receptor nuclear translocator Source MGI Symbol Acc MGI 88071
A03	UPFM083308 8	ENSMUST00000 172154.7	Atf1	ENSMUSG00 000023027	activating transcription factor 1 Source MGI Symbol Acc MGI 1298366
A04	UPFM100059 0	ENSMUST00000 154456.7	Atf2	ENSMUSG00 000027104	activating transcription factor 2 Source MGI Symbol Acc MGI 109349
A05	UPFM099470 5	ENSMUST00000 027941.13	Atf3	ENSMUSG00 000026628	activating transcription factor 3 Source MGI Symbol Acc MGI 109384
A06	UPFM075251 7	ENSMUST00000 229828.1	Atf4	ENSMUSG00 000042406	activating transcription factor 4 Source MGI Symbol Acc MGI 88096
A07	UPFM099260 7	ENSMUST00000 042985.10	Cebpa	ENSMUSG00 000034957	CCAAT/enhancer binding protein (C/EBP), alpha Source MGI Symbol Acc MGI 99480
A08	UPFM117294 0	ENSMUST00000 070642.3	Cebpb	ENSMUSG00 000056501	CCAAT/enhancer binding protein (C/EBP), beta Source MGI Symbol Acc MGI 88373
A09	UPFM081494 5	ENSMUST00000 130491.2	Cebpg	ENSMUSG00 000056216	CCAAT/enhancer binding protein (C/EBP), gamma Source MGI Symbol Acc MGI 104982
A10	UPFM099157 3	ENSMUST00000 207907.1	Clasrp	ENSMUSG00 000061028	CLK4-associating serine/arginine rich protein Source MGI Symbol Acc MGI 1855695
A11	UPFM085293 8	ENSMUST00000 087366.10	Creb1	ENSMUSG00 000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
A12	UPFM086770 7	ENSMUST00000 206098.1	Crebbp	ENSMUSG00 000022521	CREB binding protein Source MGI Symbol Acc MGI 1098280
B01	UPFM098586 3	ENSMUST00000 154356.7	Ctnnb1	ENSMUSG00 000006932	catenin (cadherin associated protein), beta 1 Source MGI Symbol Acc MGI 88276
B02	UPFM073651 0	ENSMUST00000 031190.4	Dr1	ENSMUSG00 000029265	down-regulator of transcription 1 Source MGI Symbol Acc MGI 1100515
B03	UPFM066128 0	ENSMUST00000 000894.5	E2f1	ENSMUSG00 000027490	E2F transcription factor 1 Source MGI Symbol Acc MGI 101941
B04	UPFM070565 3	ENSMUST00000 220707.1	E2f6	ENSMUSG00 000057469	E2F transcription factor 6 Source MGI Symbol Acc MGI 1354159
B05	UPFM085434 3	ENSMUST00000 165033.1	Egr1	ENSMUSG00 000038418	early growth response 1 Source MGI Symbol Acc MGI 95295
B06	UPFM083226 3	ENSMUST00000 105590.7	Esr1	ENSMUSG00 000019768	estrogen receptor 1 (alpha) Source MGI Symbol Acc MGI 1352467
B07	UPFM073575 5	ENSMUST00000 034534.12	Ets1	ENSMUSG00 000032035	E26 avian leukemia oncogene 1, 5 domain Source MGI Symbol Acc MGI 95455
B08	UPFM097328 1	ENSMUST00000 023612.16	Ets2	ENSMUSG00 000022895	E26 avian leukemia oncogene 2, 3 domain Source MGI Symbol Acc MGI 95456
B09	UPFM076456 3	ENSMUST00000 136122.7	Fos	ENSMUSG00 000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
B10	UPFM066808 0	ENSMUST00000 109964.7	Foxa2	ENSMUSG00 000037025	forkhead box A2 Source MGI Symbol Acc MGI 1347476
B11	UPFM070685 1	ENSMUST00000 179669.2	Foxg1	ENSMUSG00 000020950	forkhead box G1 Source MGI Symbol Acc MGI 1347464
B12	UPFM071598 7	ENSMUST00000 033502.13	Gata1	ENSMUSG00 000031162	GATA binding protein 1 Source MGI Symbol Acc MGI 95661
C01	UPFM074268 8	ENSMUST00000 203579.1	Gata2	ENSMUSG00 000015053	GATA binding protein 2 Source MGI Symbol Acc MGI 95662
C02	UPFM070391 0	ENSMUST00000 151456.1	Gata3	ENSMUSG00 000015619	GATA binding protein 3 Source MGI Symbol Acc MGI 95663
C03	UPFM096364 2	ENSMUST00000 218236.1	Gli1	ENSMUSG00 000025407	GLI-Kruppel family member GLI1 Source MGI Symbol Acc MGI 95727
C04	UPFM084251 4	ENSMUST00000 029938.9	Gtf2b	ENSMUSG00 000028271	general transcription factor IIB Source MGI Symbol Acc MGI 2385191
C05	UPFM080914 5	ENSMUST00000 002733.6	Gtf2f1	ENSMUSG00 000002658	general transcription factor IIF, polypeptide 1 Source MGI Symbol Acc MGI 1923848
C06	UPFM078237 6	ENSMUST00000 160392.8	Hand1	ENSMUSG00 000037335	heart and neural crest derivatives expressed 1 Source MGI Symbol Acc MGI 103577
C07	UPFM078133 8	ENSMUST00000 040104.4	Hand2	ENSMUSG00 000038193	heart and neural crest derivatives expressed 2 Source MGI Symbol Acc MGI 103580
C08	UPFM093590 7	ENSMUST00000 125718.7	Hdac1	ENSMUSG00 000028800	histone deacetylase 1 Source MGI Symbol Acc MGI 108086
C09	UPFM090240 6	ENSMUST00000 110461.7	Hif1a	ENSMUSG00 000021109	hypoxia inducible factor 1, alpha subunit Source MGI Symbol Acc MGI 106918
C10	UPFM090592 7	ENSMUST00000 176911.7	Hnf1a	ENSMUSG00 000029556	HNF1 homeobox A Source MGI Symbol Acc MGI 98504
	UPFM089220	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	5	137449.1	Hnf4a	000017950	hepatic nuclear factor 4, alpha Source MGI Symbol Acc MGI 109128
C12	UPFM062254 0	ENSMUST00000 048794.6	Hoxa5	ENSMUSG00 000038253	homeobox A5 Source MGI Symbol Acc MGI 96177
D01	UPFM070667 3	ENSMUST00000 226872.1	Hsf1	ENSMUSG00 000022556	heat shock factor 1 Source MGI Symbol Acc MGI 96238
D02	UPFM085834 2	ENSMUST00000 109824.1	Id1	ENSMUSG00 000042745	inhibitor of DNA binding 1 Source MGI Symbol Acc MGI 96396
D03	UPFM062425 2	ENSMUST00000 142221.7	Irf1	ENSMUSG00 000018899	interferon regulatory factor 1 Source MGI Symbol Acc MGI 96590
D04	UPFM097521 6	ENSMUST00000 107094.1	Jun	ENSMUSG00 000052684	jun proto-oncogene Source MGI Symbol Acc MGI 96646
D05	UPFM090452 1	ENSMUST00000 064922.6	Junb	ENSMUSG00 000052837	jun B proto-oncogene Source MGI Symbol Acc MGI 96647
D06	UPFM100589 8	ENSMUST00000 095267.5	Jund	ENSMUSG00 000071076	jun D proto-oncogene Source MGI Symbol Acc MGI 96648
D07	UPFM068955 6	ENSMUST00000 184279.1	Kcnh8	ENSMUSG00 000035580	potassium voltage-gated channel, subfamily H (eag-related), member 8 Source MGI Symbol Acc MGI 2445160
D08	UPFM092134 0	ENSMUST00000 110395.10	Max	ENSMUSG00 000059436	Max protein Source MGI Symbol Acc MGI 96921
D09	UPFM094947 9	ENSMUST00000 156690.7	Mef2a	ENSMUSG00 000030557	myocyte enhancer factor 2A Source MGI Symbol Acc MGI 99532
D10	UPFM098317 5	ENSMUST00000 163756.1	Mef2b	ENSMUSG00 000079033	myocyte enhancer factor 2B Source MGI Symbol Acc MGI 104526
D11	UPFM062873 4	ENSMUST00000 199262.1	Mef2c	ENSMUSG00 000005583	myocyte enhancer factor 2C Source MGI Symbol Acc MGI 99458
D12	UPFM081421 4	ENSMUST00000 161976.7	Myc	ENSMUSG00 000022346	myelocytomatosis oncogene Source MGI Symbol Acc MGI 97250
E01	UPFM080954 1	ENSMUST00000 000445.1	Myf5	ENSMUSG00 000000435	myogenic factor 5 Source MGI Symbol Acc MGI 97252
E02	UPFM063561 8	ENSMUST00000 072514.2	Myod1	ENSMUSG00 000009471	myogenic differentiation 1 Source MGI Symbol Acc MGI 97275
E03	UPFM071109 7	ENSMUST00000 063563.8	Nanos2	ENSMUSG00 000051965	nanos C2HC-type zinc finger 2 Source MGI Symbol Acc MGI 2676627
E04	UPFM079466 4	ENSMUST00000 125721.7	Nfat5	ENSMUSG00 000003847	nuclear factor of activated T cells 5 Source MGI Symbol Acc MGI 1859333
E05	UPFM080568 2	ENSMUST00000 099067.9	Nfatc2	ENSMUSG00 000027544	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 2 Source MGI Symbol Acc MGI 102463
E06	UPFM066089 7	ENSMUST00000 109308.2	Nfatc3	ENSMUSG00 000031902	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 3 Source MGI Symbol Acc MGI 103296
E07	UPFM098815 8	ENSMUST00000 024179.5	Nfatc4	ENSMUSG00 000023411	nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 4 Source MGI Symbol Acc MGI 1920431
E08	UPFM098758 7	ENSMUST00000 029812.13	Nfkb1	ENSMUSG00 000028163	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E09	UPFM076344 3	ENSMUST00000 142523.1	Nfya	ENSMUSG00 000020248	nuclear transcription factor-Y beta Source MGI Symbol Acc MGI 97317
E10	UPFM075838 6	ENSMUST00000 097592.8	Nr3c1	ENSMUSG00 000024431	nuclear receptor subfamily 3, group C, member 1 Source MGI Symbol Acc MGI 95824
E11	UPFM072669 9	ENSMUST00000 111085.7	Pax6	ENSMUSG00 000027168	paired box 6 Source MGI Symbol Acc MGI 97490
E12	UPFM096914 5	ENSMUST00000 214322.1	Pou2af1	ENSMUSG00 000032053	POU domain, class 2, associating factor 1 Source MGI Symbol Acc MGI 105086
F01	UPFM096943 9	ENSMUST00000 138813.7	Ppara	ENSMUSG00 000022383	peroxisome proliferator activated receptor alpha Source MGI Symbol Acc MGI 104740
F02	UPFM084296 6	ENSMUST00000 203732.2	Pparg	ENSMUSG00 000000440	peroxisome proliferator activated receptor gamma Source MGI Symbol Acc MGI 97747
F03	UPFM077278 8	ENSMUST00000 022701.6	Rb1	ENSMUSG00 000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F04	UPFM068973 8	ENSMUST00000 102864.4	Rel	ENSMUSG00 000020275	reticuloendotheliosis oncogene Source MGI Symbol Acc MGI 97897
F05	UPFM081915 5	ENSMUST00000 025867.5	Rela	ENSMUSG00 000024927	v-rel reticuloendotheliosis viral oncogene homolog A (avian) Source MGI Symbol Acc MGI 103290
F06	UPFM099034 9	ENSMUST00000 210678.1	Smad1	ENSMUSG00 000031681	SMAD family member 1 Source MGI Symbol Acc MGI 109452
F07	UPFM098632 8	ENSMUST00000 114939.1	Smad4	ENSMUSG00 000024515	SMAD family member 4 Source MGI Symbol Acc MGI 894293
F08	UPFM067573 6	ENSMUST00000 109876.7	Smad5	ENSMUSG00 000021540	SMAD family member 5 Source MGI Symbol Acc MGI 1328787
F09	UPFM096812 7	ENSMUST00000 029371.2	Smad9	ENSMUSG00 000027796	SMAD family member 9 Source MGI Symbol Acc MGI 1859993
F10	UPFM083079 3	ENSMUST00000 001326.6	Sp1	ENSMUSG00 000001280	trans-acting transcription factor 1 Source MGI Symbol Acc MGI 98372

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM073134 1	ENSMUST00000 129565.1	Sp3	ENSMUSG00 000027109	trans-acting transcription factor 3 Source MGI Symbol Acc MGI 1277166
F12	UPFM071531 5	ENSMUST00000 186574.6	Stat1	ENSMUSG00 000026104	signal transducer and activator of transcription 1 Source MGI Symbol Acc MGI 103063
G01	UPFM064876 8	ENSMUST00000 217852.1	Stat2	ENSMUSG00 000040033	signal transducer and activator of transcription 2 Source MGI Symbol Acc MGI 103039
G02	UPFM098484 5	ENSMUST00000 092671.11	Stat3	ENSMUSG00 000004040	signal transducer and activator of transcription 3 Source MGI Symbol Acc MGI 103038
G03	UPFM062533 9	ENSMUST00000 168302.7	Stat4	ENSMUSG00 000062939	signal transducer and activator of transcription 4 Source MGI Symbol Acc MGI 103062
G04	UPFM096618 6	ENSMUST00000 138083.7	Stat5a	ENSMUSG00 000004043	signal transducer and activator of transcription 5A Source MGI Symbol Acc MGI 103036
G05	UPFM070808 3	ENSMUST00000 004143.2	Stat5b	ENSMUSG00 000020919	signal transducer and activator of transcription 5B Source MGI Symbol Acc MGI 103035
G06	UPFM075580 6	ENSMUST00000 092074.11	Stat6	ENSMUSG00 000002147	signal transducer and activator of transcription 6 Source MGI Symbol Acc MGI 103034
G07	UPFM086254 8	ENSMUST00000 162505.7	Tbp	ENSMUSG00 000014767	TATA box binding protein Source MGI Symbol Acc MGI 101838
G08	UPFM098825 9	ENSMUST00000 142291.7	Tcf7l2	ENSMUSG00 000024985	transcription factor 7 like 2, T cell specific, HMG box Source MGI Symbol Acc MGI 1202879
G09	UPFM074872 1	ENSMUST00000 021787.6	Tfap2a	ENSMUSG00 000021359	transcription factor AP-2, alpha Source MGI Symbol Acc MGI 104671
G10	UPFM091450 6	ENSMUST00000 059775.14	Tgif1	ENSMUSG00 000047407	TGFB-induced factor homeobox 1 Source MGI Symbol Acc MGI 1194497
G11	UPFM066913 3	ENSMUST00000 171247.7	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G12	UPFM086946 3	ENSMUST00000 126912.1	Yy1	ENSMUSG00 000021264	YY1 transcription factor Source MGI Symbol Acc MGI 99150
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ 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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