

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

## Mouse Angiogenic Growth Factors

Cat. no. 249955 UPMM-072ZA

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](http://www.qiagen.com) for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Adams1	Aggf1	Amot	Angpt1	Angpt2	Angptl1	Angptl3	Angptl4	Adgrb1	Btg1	Cd55	Cd59b
B	Cga	Chga	Cited1	Col18a1	Col4a3	Crhr2	Csf3	Cxcl10	Cxcl2	Edil3	Egfl7	Erap1
C	Erb2	Ereg	Fgf1	Fgf2	Vegfd	Fn1	Foxf1	Foxm1	Foxo4	Fst	Glnn	Gri
D	Hey1	Hey2	Hgf	Hpse	Ifnb1	Ifng	Il12a	Il12b	Kdr	Lep	Mdk	Myocd
E	Ntrk2	Pdgfrb	Pf4	Pgf	Plg	Prl	Prl7d1	Ptn	Ptprj	Qk	Rasa1	Rhob
F	Rnase4	Rnh1	Runx1	Serpinc1	Serpine1	Serpinf1	Shh	Smo	Stab1	Tdgf1	Tgfa	Tgfb1
G	Thbs1	Tie1	Timp1	Timp2	Timp3	Timp4	Tnf	Tnni2	Tnni3	Vegfa	Wars2	Wt1
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	UPFM066463 0	ENSMUST00000 125897.1	Adams1	ENSMUSG00 000022893	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1 Source MGI Symbol Acc MGI 109249
A02	UPFM071650 5	ENSMUST00000 161671.1	Aggf1	ENSMUSG00 000021681	angiogenic factor with G patch and FHA domains 1 Source MGI Symbol Acc MGI 1913799
A03	UPFM087877 7	ENSMUST00000 112836.8	Amot	ENSMUSG00 000041688	angiominin Source MGI Symbol Acc MGI 108440
A04	UPFM071478 8	ENSMUST00000 022921.6	Angpt1	ENSMUSG00 000022309	angiopoietin 1 Source MGI Symbol Acc MGI 108448
A05	UPFM074499 5	ENSMUST00000 170200.1	Angpt2	ENSMUSG00 000031465	angiopoietin 2 Source MGI Symbol Acc MGI 1202890
A06	UPFM081669 3	ENSMUST00000 111720.1	Angptl1	ENSMUSG00 000033544	angiopoietin-like 1 Source MGI Symbol Acc MGI 1919963
A07	UPFM099541 9	ENSMUST00000 030280.6	Angptl3	ENSMUSG00 000028553	angiopoietin-like 3 Source MGI Symbol Acc MGI 1353627
A08	UPFM095383 3	ENSMUST00000 174872.1	Angptl4	ENSMUSG00 000002289	angiopoietin-like 4 Source MGI Symbol Acc MGI 1888999
A09	UPFM081704 4	ENSMUST00000 189353.6	Adgrb1	ENSMUSG00 000034730	adhesion G protein-coupled receptor B1 Source MGI Symbol Acc MGI 1933736
A10	UPFM080980 9	ENSMUST00000 218953.1	Btg1	ENSMUSG00 000036478	B cell translocation gene 1, anti-proliferative Source MGI Symbol Acc MGI 88215
A11	UPFM098904 0	ENSMUST00000 122830.1	Cd55	ENSMUSG00 000026399	CD55 molecule, decay accelerating factor for complement Source MGI Symbol Acc MGI 104850
A12	UPFM088773 8	ENSMUST00000 111132.7	Cd59b	ENSMUSG00 000068686	CD59b antigen Source MGI Symbol Acc MGI 1888996
B01	UPFM088755 0	ENSMUST00000 029975.9	Cga	ENSMUSG00 000028298	glycoprotein hormones, alpha subunit Source MGI Symbol Acc MGI 88390
B02	UPFM068399 9	ENSMUST00000 223100.1	Chga	ENSMUSG00 000021194	chromogranin A Source MGI Symbol Acc MGI 88394
B03	UPFM080624 5	ENSMUST00000 130589.1	Cited1	ENSMUSG00 000051159	Cbp/p300-interacting transactivator with Glu/Asp-rich carboxy-terminal domain 1 Source MGI Symbol Acc MGI 108023
B04	UPFM064280 3	ENSMUST00000 072755.11	Col18a1	ENSMUSG00 000001435	collagen, type XVIII, alpha 1 Source MGI Symbol Acc MGI 88451
B05	UPFM077676 4	ENSMUST00000 125563.7	Col4a3	ENSMUSG00 000079465	collagen, type IV, alpha 3 Source MGI Symbol Acc MGI 104688
B06	UPFM093165 3	ENSMUST00000 212633.1	Crh2	ENSMUSG00 000003476	corticotropin releasing hormone receptor 2 Source MGI Symbol Acc MGI 894312
B07	UPFM089304 3	ENSMUST00000 038886.2	Csf3	ENSMUSG00 000038067	colony stimulating factor 3 (granulocyte) Source MGI Symbol Acc MGI 1339751
B08	UPFM098980 6	ENSMUST00000 038816.12	Cxcl10	ENSMUSG00 000034855	chemokine (C-X-C motif) ligand 10 Source MGI Symbol Acc MGI 1352450
B09	UPFM067324 0	ENSMUST00000 200919.1	Cxcl2	ENSMUSG00 000058427	chemokine (C-X-C motif) ligand 2 Source MGI Symbol Acc MGI 1340094
B10	UPFM064919 0	ENSMUST00000 153974.7	Edil3	ENSMUSG00 000034488	EGF-like repeats and discoidin I-like domains 3 Source MGI Symbol Acc MGI 1329025
B11	UPFM083051 9	ENSMUST00000 147351.2	Egfl7	ENSMUSG00 000026921	EGF-like domain 7 Source MGI Symbol Acc MGI 2449923
B12	UPFM093130 2	ENSMUST00000 220594.1	Erap1	ENSMUSG00 000021583	endoplasmic reticulum aminopeptidase 1 Source MGI Symbol Acc MGI 1933403
C01	UPFM099508 8	ENSMUST00000 136032.1	ErbB2	ENSMUSG00 000062312	erb-b2 receptor tyrosine kinase 2 Source MGI Symbol Acc MGI 95410
C02	UPFM069297 7	ENSMUST00000 031324.5	Ereg	ENSMUSG00 000029377	epiregulin Source MGI Symbol Acc MGI 107508
C03	UPFM088976 4	ENSMUST00000 139972.1	Fgf1	ENSMUSG00 000036585	fibroblast growth factor 1 Source MGI Symbol Acc MGI 95515
C04	UPFM073062 9	ENSMUST00000 145228.1	Fgf2	ENSMUSG00 000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
C05	UPFM097949 5	ENSMUST00000 033751.7	Vegfd	ENSMUSG00 000031380	vascular endothelial growth factor D Source MGI Symbol Acc MGI 108037
C06	UPFM086511 0	ENSMUST00000 188894.6	Fn1	ENSMUSG00 000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
C07	UPFM082662 2	ENSMUST00000 181504.1	Foxf1	ENSMUSG00 000042812	forkhead box F1 Source MGI Symbol Acc MGI 1347470
C08	UPFM094820 5	ENSMUST00000 073316.12	Foxm1	ENSMUSG00 000001517	forkhead box M1 Source MGI Symbol Acc MGI 1347487
C09	UPFM077322 2	ENSMUST00000 150558.1	Foxo4	ENSMUSG00 000042903	forkhead box O4 Source MGI Symbol Acc MGI 1891915
C10	UPFM064893 2	ENSMUST00000 022287.7	Fst	ENSMUSG00 000021765	follistatin Source MGI Symbol Acc MGI 95586
	UPFM097506	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	4	100949.9	Glmn	000029276	glomulin, FKBP associated protein Source MGI Symbol Acc MGI 2141180
C12	UPFM0748183	ENSMUST00000129997.1	Grn	ENSMUSG0000034708	granulin Source MGI Symbol Acc MGI 95832
D01	UPFM1003195	ENSMUST00000192102.1	Hey1	ENSMUSG0000040289	hairly/enhancer-of-split related with YRPW motif 1 Source MGI Symbol Acc MGI 1341800
D02	UPFM0650734	ENSMUST00000019924.8	Hey2	ENSMUSG0000019789	hairly/enhancer-of-split related with YRPW motif 2 Source MGI Symbol Acc MGI 1341884
D03	UPFM0813020	ENSMUST00000199900.1	Hgf	ENSMUSG0000028864	hepatocyte growth factor Source MGI Symbol Acc MGI 96079
D04	UPFM0811998	ENSMUST00000112908.1	Hpse	ENSMUSG0000035273	heparanase Source MGI Symbol Acc MGI 1343124
D05	UPFM0639442	ENSMUST00000055671.4	Ifnb1	ENSMUSG0000048806	interferon beta 1, fibroblast Source MGI Symbol Acc MGI 107657
D06	UPFM1172950	ENSMUST00000068592.4	Ifng	ENSMUSG0000055170	interferon gamma Source MGI Symbol Acc MGI 107656
D07	UPFM0831140	ENSMUST00000029345.11	Il12a	ENSMUSG0000027776	interleukin 12a Source MGI Symbol Acc MGI 96539
D08	UPFM0785020	ENSMUST00000170513.2	Il12b	ENSMUSG0000004296	interleukin 12b Source MGI Symbol Acc MGI 96540
D09	UPFM0781643	ENSMUST00000113516.1	Kdr	ENSMUSG0000062960	kinase insert domain protein receptor Source MGI Symbol Acc MGI 96683
D10	UPFM0686147	ENSMUST00000169505.1	Lep	ENSMUSG0000059201	leptin Source MGI Symbol Acc MGI 104663
D11	UPFM0646398	ENSMUST00000069423.12	Mdk	ENSMUSG0000027239	midkine Source MGI Symbol Acc MGI 96949
D12	UPFM0669749	ENSMUST00000144399.2	Myocd	ENSMUSG0000020542	myocardin Source MGI Symbol Acc MGI 2137495
E01	UPFM0862157	ENSMUST00000225583.1	Ntrk2	ENSMUSG0000055254	neurotrophic tyrosine kinase, receptor, type 2 Source MGI Symbol Acc MGI 97384
E02	UPFM0815897	ENSMUST00000229795.1	Pdgfb	ENSMUSG0000000489	platelet derived growth factor, B polypeptide Source MGI Symbol Acc MGI 97528
E03	UPFM0745919	ENSMUST00000201990.1	Pf4	ENSMUSG0000029373	platelet factor 4 Source MGI Symbol Acc MGI 1888711
E04	UPFM0804578	ENSMUST00000222850.1	Pgf	ENSMUSG0000004791	placental growth factor Source MGI Symbol Acc MGI 105095
E05	UPFM0805374	ENSMUST00000232767.1	Plg	ENSMUSG0000059481	plasminogen Source MGI Symbol Acc MGI 97620
E06	UPFM0976113	ENSMUST00000110369.9	Prl	ENSMUSG0000021342	prolactin Source MGI Symbol Acc MGI 97762
E07	UPFM0767876	ENSMUST00000224026.1	Prl7d1	ENSMUSG0000021348	prolactin family 7, subfamily d, member 1 Source MGI Symbol Acc MGI 97619
E08	UPFM0793722	ENSMUST00000101534.4	Ptn	ENSMUSG0000029838	pleiotrophin Source MGI Symbol Acc MGI 97804
E09	UPFM0851611	ENSMUST00000111493.7	Ptpri	ENSMUSG0000025314	protein tyrosine phosphatase, receptor type, J Source MGI Symbol Acc MGI 104574
E10	UPFM0791040	ENSMUST00000097414.10	Qk	ENSMUSG0000062078	quaking Source MGI Symbol Acc MGI 97837
E11	UPFM0974344	ENSMUST00000142285.1	Rasa1	ENSMUSG0000021549	RAS p21 protein activator 1 Source MGI Symbol Acc MGI 97860
E12	UPFM0927235	ENSMUST00000067384.5	Rhob	ENSMUSG0000054364	ras homolog family member B Source MGI Symbol Acc MGI 107949
F01	UPFM0831134	ENSMUST00000169895.2	Rnase4	ENSMUSG0000021876	ribonuclease, RNase A family 4 Source MGI Symbol Acc MGI 1926217
F02	UPFM0688104	ENSMUST00000210979.1	Rnh1	ENSMUSG0000038650	ribonuclease/angiogenin inhibitor 1 Source MGI Symbol Acc MGI 1195456
F03	UPFM0728059	ENSMUST00000113956.9	Runx1	ENSMUSG0000022952	runt related transcription factor 1 Source MGI Symbol Acc MGI 99852
F04	UPFM0666111	ENSMUST00000191936.1	Serpinc1	ENSMUSG0000026715	serine (or cysteine) peptidase inhibitor, clade C (antithrombin), member 1 Source MGI Symbol Acc MGI 88095
F05	UPFM0707886	ENSMUST00000041388.10	Serpine1	ENSMUSG0000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F06	UPFM0721156	ENSMUST00000168902.7	Serpinf1	ENSMUSG0000000753	serine (or cysteine) peptidase inhibitor, clade F, member 1 Source MGI Symbol Acc MGI 108080
F07	UPFM0737070	ENSMUST00000002708.4	Shh	ENSMUSG0000002633	sonic hedgehog Source MGI Symbol Acc MGI 98297
F08	UPFM1009634	ENSMUST00000001812.4	Smo	ENSMUSG0000001761	smoothened, frizzled class receptor Source MGI Symbol Acc MGI 108075
F09	UPFM0766376	ENSMUST00000159208.7	Stab1	ENSMUSG0000042286	stabilin 1 Source MGI Symbol Acc MGI 2178742
F10	UPFM0990011	ENSMUST00000035075.12	Tdgf1	ENSMUSG0000032494	teratocarcinoma-derived growth factor 1 Source MGI Symbol Acc MGI 98658

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM083464 2	ENSMUST00000 192058.3	Tgfa	ENSMUSG00 000029999	transforming growth factor alpha Source MGI Symbol Acc MGI 98724
F12	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G01	UPFM072927 9	ENSMUST00000 039559.8	Thbs1	ENSMUSG00 000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G02	UPFM075305 4	ENSMUST00000 047421.5	Tie1	ENSMUSG00 000033191	tyrosine kinase with immunoglobulin-like and EGF-like domains 1 Source MGI Symbol Acc MGI 99906
G03	UPFM079676 3	ENSMUST00000 009530.4	Timp1	ENSMUSG00 000001131	tissue inhibitor of metalloproteinase 1 Source MGI Symbol Acc MGI 98752
G04	UPFM073508 3	ENSMUST00000 017610.9	Timp2	ENSMUSG00 000017466	tissue inhibitor of metalloproteinase 2 Source MGI Symbol Acc MGI 98753
G05	UPFM066788 6	ENSMUST00000 020234.13	Timp3	ENSMUSG00 000020044	tissue inhibitor of metalloproteinase 3 Source MGI Symbol Acc MGI 98754
G06	UPFM091836 6	ENSMUST00000 032462.8	Timp4	ENSMUSG00 000030317	tissue inhibitor of metalloproteinase 4 Source MGI Symbol Acc MGI 109125
G07	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G08	UPFM097742 7	ENSMUST00000 210239.1	Tnni2	ENSMUSG00 000031097	troponin I, skeletal, fast 2 Source MGI Symbol Acc MGI 105070
G09	UPFM095507 3	ENSMUST00000 154913.1	Tnni3	ENSMUSG00 000035458	troponin I, cardiac 3 Source MGI Symbol Acc MGI 98783
G10	UPFM117296 6	ENSMUST00000 214739.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G11	UPFM094961 7	ENSMUST00000 126875.1	Wars2	ENSMUSG00 000004233	tryptophanyl tRNA synthetase 2 (mitochondrial) Source MGI Symbol Acc MGI 1917810
G12	UPFM100747 1	ENSMUST00000 111098.7	Wt1	ENSMUSG00 000016458	Wilms tumor 1 homolog Source MGI Symbol Acc MGI 98968
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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