

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

## Mouse Endothelial Cell Biology

Cat. no. 249955 UPMM-015ZR

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	Ace	Adam17	Agf1	Agtr1a	Angpt1	Anxa5	ApoE	Bax	Bcl2	Bcl2l1	Casp1	Casp3
B	Cav1	Ccl2	Ccl5	Cdh5	Cflar	Col18a1	Crodd	Cx3cl1	Cxcl1	Cxcl2	Cxcr5	Edn1
C	Edn2	Ednra	Eng	F2r	F2rl1	F3	Fas	Fasl	Fgf1	Fgf2	Fit1	Fn1
D	Hif1a	Icam1	Il11	Il1b	Il3	Il6	Il7	Itga5	Itgav	Itgb1	Itgb3	Kdr
E	Kit	Mmp1a	Mmp2	Mmp9	Nos3	Nppb	Npr1	Ocln	Pdgfra	Pecam1	Pf4	Pgf
F	Plat	Plau	Plg	Procr	Ptgs1	Ptgs2	Sele	Sell	Selp	Selplg	Serpine1	Sod1
G	Tek	Tspi	Tgfb1	Thbd	Thbs1	Timp1	Tnf	Tnfrsf10	Tymp	Vcam1	Vegfa	Vwf
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	UPFM092937 6	ENSMUST00000 151657.1	Ace	ENSMUSG00 000020681	angiotensin I converting enzyme (peptidyl-dipeptidase A) 1 Source MGI Symbol Acc MGI 87874
A02	UPFM063038 2	ENSMUST00000 064536.12	Adam17	ENSMUSG00 000052593	a disintegrin and metallopeptidase domain 17 Source MGI Symbol Acc MGI 1096335
A03	UPFM088419 7	ENSMUST00000 063278.6	Agf	ENSMUSG00 000031980	angiotensinogen (serpin peptidase inhibitor, clade A, member 8) Source MGI Symbol Acc MGI 87963
A04	UPFM072210 8	ENSMUST00000 222370.1	Agtr1a	ENSMUSG00 000049115	angiotensin II receptor, type 1a Source MGI Symbol Acc MGI 87964
A05	UPFM071478 8	ENSMUST00000 022921.6	Angpt1	ENSMUSG00 000022309	angiotensinogen converting enzyme 1 Source MGI Symbol Acc MGI 108448
A06	UPFM099844 2	ENSMUST00000 029266.13	Anxa5	ENSMUSG00 000027712	annexin A5 Source MGI Symbol Acc MGI 106008
A07	UPFM092642 1	ENSMUST00000 172808.1	ApoE	ENSMUSG00 000002985	apolipoprotein E Source MGI Symbol Acc MGI 88057
A08	UPFM090386 1	ENSMUST00000 211195.1	Bax	ENSMUSG00 000003873	BCL2-associated X protein Source MGI Symbol Acc MGI 99702
A09	UPFM063585 3	ENSMUST00000 112751.1	Bcl2	ENSMUSG00 000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A10	UPFM066341 1	ENSMUST00000 156688.1	Bcl2l1	ENSMUSG00 000007659	BCL2-like 1 Source MGI Symbol Acc MGI 88139
A11	UPFM095374 8	ENSMUST00000 027015.5	Casp1	ENSMUSG00 000025888	caspace 1 Source MGI Symbol Acc MGI 96544
A12	UPFM072895 1	ENSMUST00000 210534.1	Casp3	ENSMUSG00 000031628	caspace 3 Source MGI Symbol Acc MGI 107739
B01	UPFM094042 8	ENSMUST00000 150901.1	Cav1	ENSMUSG00 000007655	caveolin 1, caveolae protein Source MGI Symbol Acc MGI 102709
B02	UPFM094573 3	ENSMUST00000 124479.1	Ccl2	ENSMUSG00 000035385	chemokine (C-C motif) ligand 2 Source MGI Symbol Acc MGI 98259
B03	UPFM078318 2	ENSMUST00000 035938.2	Ccl5	ENSMUSG00 000035042	chemokine (C-C motif) ligand 5 Source MGI Symbol Acc MGI 98262
B04	UPFM084041 9	ENSMUST00000 034339.9	Cdh5	ENSMUSG00 000031871	cadherin 5 Source MGI Symbol Acc MGI 105057
B05	UPFM082486 2	ENSMUST00000 069333.7	Cflar	ENSMUSG00 000026031	CASP8 and FADD-like apoptosis regulator Source MGI Symbol Acc MGI 1336166
B06	UPFM064280 3	ENSMUST00000 072755.11	Col18a1	ENSMUSG00 000001435	collagen, type XVIII, alpha 1 Source MGI Symbol Acc MGI 88451
B07	UPFM073143 9	ENSMUST00000 220279.1	Cradd	ENSMUSG00 000045867	CASP2 and RIPK1 domain containing adaptor with death domain Source MGI Symbol Acc MGI 1336168
B08	UPFM069455 3	ENSMUST00000 150307.1	Cx3cl1	ENSMUSG00 000031778	chemokine (C-X3-C motif) ligand 1 Source MGI Symbol Acc MGI 1097153
B09	UPFM097448 9	ENSMUST00000 031327.8	Cxcl1	ENSMUSG00 000029380	chemokine (C-X-C motif) ligand 1 Source MGI Symbol Acc MGI 108068
B10	UPFM067324 0	ENSMUST00000 200919.1	Cxcl2	ENSMUSG00 000058427	chemokine (C-X-C motif) ligand 2 Source MGI Symbol Acc MGI 1340094
B11	UPFM061992 1	ENSMUST00000 215661.1	Cxcr5	ENSMUSG00 000047880	chemokine (C-X-C motif) receptor 5 Source MGI Symbol Acc MGI 103567
B12	UPFM063234 4	ENSMUST00000 021796.8	Edn1	ENSMUSG00 000021367	endothelin 1 Source MGI Symbol Acc MGI 95283
C01	UPFM078925 1	ENSMUST00000 030384.4	Edn2	ENSMUSG00 000028635	endothelin 2 Source MGI Symbol Acc MGI 95284
C02	UPFM066650 7	ENSMUST00000 146561.1	Ednra	ENSMUSG00 000031616	endothelin receptor type A Source MGI Symbol Acc MGI 105923
C03	UPFM062460 8	ENSMUST00000 009705.13	Eng	ENSMUSG00 000026814	endoglin Source MGI Symbol Acc MGI 95392
C04	UPFM087068 2	ENSMUST00000 059193.6	F2r	ENSMUSG00 000048376	coagulation factor II (thrombin) receptor Source MGI Symbol Acc MGI 101802
C05	UPFM086509 0	ENSMUST00000 022185.9	F2r1	ENSMUSG00 000021678	coagulation factor II (thrombin) receptor-like 1 Source MGI Symbol Acc MGI 101910
C06	UPFM098656 9	ENSMUST00000 029771.12	F3	ENSMUSG00 000028128	coagulation factor III Source MGI Symbol Acc MGI 88381
C07	UPFM099578 7	ENSMUST00000 235709.1	Fas	ENSMUSG00 000024778	Fas (TNF receptor superfamily member 6) Source MGI Symbol Acc MGI 95484
C08	UPFM074944 2	ENSMUST00000 193648.1	FasL	ENSMUSG00 000000817	Fas ligand (TNF superfamily, member 6) Source MGI Symbol Acc MGI 99255
C09	UPFM088976 4	ENSMUST00000 139972.1	Fgf1	ENSMUSG00 000036585	fibroblast growth factor 1 Source MGI Symbol Acc MGI 95515
C10	UPFM073062 9	ENSMUST00000 145228.1	Fgf2	ENSMUSG00 000037225	fibroblast growth factor 2 Source MGI Symbol Acc MGI 95516
	UPFM071363	ENSMUST00000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	0	110529.5	Fli1	000029648	FMS-like tyrosine kinase 1 Source MGI Symbol Acc MGI 95558
C12	UPFM086511 0	ENSMUST00000 188894.6	Fn1	ENSMUSG00 000026193	fibronectin 1 Source MGI Symbol Acc MGI 95566
D01	UPFM090240 6	ENSMUST00000 110461.7	Hif1a	ENSMUSG00 000021109	hypoxia inducible factor 1, alpha subunit Source MGI Symbol Acc MGI 106918
D02	UPFM084326 4	ENSMUST00000 215003.1	Icam1	ENSMUSG00 000037405	intercellular adhesion molecule 1 Source MGI Symbol Acc MGI 96392
D03	UPFM083567 7	ENSMUST00000 163481.2	Il11	ENSMUSG00 000004371	interleukin 11 Source MGI Symbol Acc MGI 107613
D04	UPFM067128 1	ENSMUST00000 155994.1	Il1b	ENSMUSG00 000027398	interleukin 1 beta Source MGI Symbol Acc MGI 96543
D05	UPFM084591 6	ENSMUST00000 019058.5	Il3	ENSMUSG00 000018914	interleukin 3 Source MGI Symbol Acc MGI 96552
D06	UPFM072909 9	ENSMUST00000 195978.4	Il6	ENSMUSG00 000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D07	UPFM091608 1	ENSMUST00000 194279.5	Il7	ENSMUSG00 000040329	interleukin 7 Source MGI Symbol Acc MGI 96561
D08	UPFM078839 0	ENSMUST00000 215331.1	Itga5	ENSMUSG00 000000555	integrin alpha 5 (fibronectin receptor alpha) Source MGI Symbol Acc MGI 96604
D09	UPFM085524 7	ENSMUST00000 028499.10	Itgav	ENSMUSG00 000027087	integrin alpha V Source MGI Symbol Acc MGI 96608
D10	UPFM093465 6	ENSMUST00000 124826.1	Itgb1	ENSMUSG00 000025809	integrin beta 1 (fibronectin receptor beta) Source MGI Symbol Acc MGI 96610
D11	UPFM079961 6	ENSMUST00000 127140.2	Itgb3	ENSMUSG00 000020689	integrin beta 3 Source MGI Symbol Acc MGI 96612
D12	UPFM078164 3	ENSMUST00000 113516.1	Kdr	ENSMUSG00 000062960	kinase insert domain protein receptor Source MGI Symbol Acc MGI 96683
E01	UPFM098121 2	ENSMUST00000 143221.1	Kit	ENSMUSG00 000005672	KIT proto-oncogene receptor tyrosine kinase Source MGI Symbol Acc MGI 96677
E02	UPFM093736 0	ENSMUST00000 217651.1	Mmp1a	ENSMUSG00 000043089	matrix metalloproteinase 1a (interstitial collagenase) Source MGI Symbol Acc MGI 1933846
E03	UPFM073737 4	ENSMUST00000 211567.1	Mmp2	ENSMUSG00 000031740	matrix metalloproteinase 2 Source MGI Symbol Acc MGI 97009
E04	UPFM079930 8	ENSMUST00000 017881.2	Mmp9	ENSMUSG00 000017737	matrix metalloproteinase 9 Source MGI Symbol Acc MGI 97011
E05	UPFM067358 1	ENSMUST00000 115090.5	Nos3	ENSMUSG00 000028978	nitric oxide synthase 3, endothelial cell Source MGI Symbol Acc MGI 97362
E06	UPFM079846 6	ENSMUST00000 103231.4	Nppb	ENSMUSG00 000029019	natriuretic peptide type B Source MGI Symbol Acc MGI 97368
E07	UPFM099009 8	ENSMUST00000 029540.12	Npr1	ENSMUSG00 000027931	natriuretic peptide receptor 1 Source MGI Symbol Acc MGI 97371
E08	UPFM087486 1	ENSMUST00000 069756.10	Ocln	ENSMUSG00 000021638	occludin Source MGI Symbol Acc MGI 106183
E09	UPFM073646 8	ENSMUST00000 202186.3	Pdgfra	ENSMUSG00 000029231	platelet derived growth factor receptor, alpha polypeptide Source MGI Symbol Acc MGI 97530
E10	UPFM095037 6	ENSMUST00000 068021.8	Pecam1	ENSMUSG00 000020717	platelet/endothelial cell adhesion molecule 1 Source MGI Symbol Acc MGI 97537
E11	UPFM074591 9	ENSMUST00000 201990.1	Pf4	ENSMUSG00 000029373	platelet factor 4 Source MGI Symbol Acc MGI 1888711
E12	UPFM080457 8	ENSMUST00000 222850.1	Pgf	ENSMUSG00 000004791	placental growth factor Source MGI Symbol Acc MGI 105095
F01	UPFM093204 7	ENSMUST00000 033941.6	Plat	ENSMUSG00 000031538	plasminogen activator, tissue Source MGI Symbol Acc MGI 97610
F02	UPFM083661 6	ENSMUST00000 224141.1	Plau	ENSMUSG00 000021822	plasminogen activator, urokinase Source MGI Symbol Acc MGI 97611
F03	UPFM080537 4	ENSMUST00000 232767.1	Plg	ENSMUSG00 000059481	plasminogen Source MGI Symbol Acc MGI 97620
F04	UPFM085002 6	ENSMUST00000 155095.1	Procr	ENSMUSG00 000027611	protein C receptor, endothelial Source MGI Symbol Acc MGI 104596
F05	UPFM091613 9	ENSMUST00000 136271.1	Ptgis	ENSMUSG00 000017969	prostaglandin I2 (prostaglyclin) synthase Source MGI Symbol Acc MGI 1097156
F06	UPFM100449 2	ENSMUST00000 190784.1	Ptgs2	ENSMUSG00 000032487	prostaglandin-endoperoxide synthase 2 Source MGI Symbol Acc MGI 97798
F07	UPFM094696 9	ENSMUST00000 027874.5	Sele	ENSMUSG00 000026582	selectin, endothelial cell Source MGI Symbol Acc MGI 98278
F08	UPFM077751 1	ENSMUST00000 097491.9	Sell	ENSMUSG00 000026581	selectin, lymphocyte Source MGI Symbol Acc MGI 98279
F09	UPFM093521 9	ENSMUST00000 162746.1	Selp	ENSMUSG00 000026580	selectin, platelet Source MGI Symbol Acc MGI 98280
F10	UPFM068296 7	ENSMUST00000 201194.3	Selp1g	ENSMUSG00 000048163	selectin, platelet (p-selectin) ligand Source MGI Symbol Acc MGI 106689

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM070788 6	ENSMUST00000 041388.10	Serpine1	ENSMUSG00 000037411	serine (or cysteine) peptidase inhibitor, clade E, member 1 Source MGI Symbol Acc MGI 97608
F12	UPFM092762 0	ENSMUST00000 023707.10	Sod1	ENSMUSG00 000022982	superoxide dismutase 1, soluble Source MGI Symbol Acc MGI 98351
G01	UPFM093936 7	ENSMUST00000 131958.1	Tek	ENSMUSG00 000006386	TEK receptor tyrosine kinase Source MGI Symbol Acc MGI 98664
G02	UPFM085129 1	ENSMUST00000 144775.1	Tfpi	ENSMUSG00 000027082	tissue factor pathway inhibitor Source MGI Symbol Acc MGI 1095418
G03	UPFM066688 0	ENSMUST00000 171757.1	Tgfb1	ENSMUSG00 000002603	transforming growth factor, beta 1 Source MGI Symbol Acc MGI 98725
G04	UPFM069128 2	ENSMUST00000 099270.4	Thbd	ENSMUSG00 000074743	thrombomodulin Source MGI Symbol Acc MGI 98736
G05	UPFM072927 9	ENSMUST00000 039559.8	Thbs1	ENSMUSG00 000040152	thrombospondin 1 Source MGI Symbol Acc MGI 98737
G06	UPFM079676 3	ENSMUST00000 009530.4	Timp1	ENSMUSG00 000001131	tissue inhibitor of metalloproteinase 1 Source MGI Symbol Acc MGI 98752
G07	UPFM063847 1	ENSMUST00000 025263.14	Tnf	ENSMUSG00 000024401	tumor necrosis factor Source MGI Symbol Acc MGI 104798
G08	UPFM068209 9	ENSMUST00000 174840.1	Tnfsf10	ENSMUSG00 000039304	tumor necrosis factor (ligand) superfamily, member 10 Source MGI Symbol Acc MGI 107414
G09	UPFM076217 8	ENSMUST00000 023285.4	Tymp	ENSMUSG00 000022615	thymidine phosphorylase Source MGI Symbol Acc MGI 1920212
G10	UPFM083873 5	ENSMUST00000 029574.12	Vcam1	ENSMUSG00 000027962	vascular cell adhesion molecule 1 Source MGI Symbol Acc MGI 98926
G11	UPFM117296 6	ENSMUST00000 214739.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
G12	UPFM094390 4	ENSMUST00000 112253.5	Vwf	ENSMUSG00 000001930	Von Willebrand factor Source MGI Symbol Acc MGI 98941
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.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at [www.qiagen.com](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.