

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

Mouse Protein Phosphatases

Cat. no. 249955 UPMM-045ZR

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 for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Acp1	Acp2	Cdc14a	Cdc14b	Cdc25a	Cdc25b	Cdc25c	Cdkn3	Dusp1	Dusp10	Dusp12	Dusp14
B	Dusp16	Dusp22	Dusp23	Dusp26	Dusp3	Dusp4	Dusp5	Dusp6	Dusp7	Dusp8	Dusp9	Ilkbp
C	Pdp1	Phlpp1	Ppef1	Ppm1a	Ppm1b	Ppm1d	Ppm1f	Ppm1g	Ppp1ca	Ppp1cb	Ppp2ca	Ppp2cb
D	Ppp3ca	Ppp3cb	Ppp3cc	Ppp4c	Ppp5c	Pten	Ptp4a1	Ptp4a2	Ptp4a3	Hacd1	Ptpn1	Ptpn11
E	Ptpn12	Ptpn13	Ptpn14	Ptpn2	Ptpn21	Ptpn22	Ptpn23	Ptpn3	Ptpn4	Ptpn5	Ptpn6	Ptpn7
F	Ptpn9	Ptpnra	Ptpnrb	Ptpnrc	Ptpnrd	Ptpnre	Ptpnrf	Ptpnrg	Ptpnrh	Ptpnrj	Ptpnrk	Ptpnrm
G	Ptpn	Ptpn2	Ptpn	Ptpn	Ptpn	Ptpn	Ptpn	Ptpn	Ssh1	Ssu72	Tns2	Tple
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	UPFM073819 6	ENSMUST000000 218696.1	Acp1	ENSMUSG000 000044573	acid phosphatase 1, soluble Source MGI Symbol Acc MGI 87881
A02	UPFM099847 3	ENSMUST000000 155418.1	Acp2	ENSMUSG000 000002103	acid phosphatase 2, lysosomal Source MGI Symbol Acc MGI 87882
A03	UPFM098340 5	ENSMUST000000 197830.4	Cdc14a	ENSMUSG000 000033502	CDC14 cell division cycle 14A Source MGI Symbol Acc MGI 2442676
A04	UPFM093089 1	ENSMUST000000 109770.1	Cdc14b	ENSMUSG000 000033102	CDC14 cell division cycle 14B Source MGI Symbol Acc MGI 2441808
A05	UPFM065474 7	ENSMUST000000 094324.7	Cdc25a	ENSMUSG000 000032477	cell division cycle 25A Source MGI Symbol Acc MGI 103198
A06	UPFM064782 5	ENSMUST000000 125423.7	Cdc25b	ENSMUSG000 000027330	cell division cycle 25B Source MGI Symbol Acc MGI 99701
A07	UPFM096467 5	ENSMUST000000 237620.1	Cdc25c	ENSMUSG000 000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
A08	UPFM086197 8	ENSMUST000000 226621.1	Cdkn3	ENSMUSG000 000037628	cyclin-dependent kinase inhibitor 3 Source MGI Symbol Acc MGI 1919641
A09	UPFM086453 7	ENSMUST000000 236661.1	Dusp1	ENSMUSG000 000024190	dual specificity phosphatase 1 Source MGI Symbol Acc MGI 105120
A10	UPFM064188 6	ENSMUST000000 048655.7	Dusp10	ENSMUSG000 000039384	dual specificity phosphatase 10 Source MGI Symbol Acc MGI 1927070
A11	UPFM091021 8	ENSMUST000000 166393.1	Dusp12	ENSMUSG000 000026659	dual specificity phosphatase 12 Source MGI Symbol Acc MGI 1890614
A12	UPFM100570 8	ENSMUST000000 018792.11	Dusp14	ENSMUSG000 000018648	dual specificity phosphatase 14 Source MGI Symbol Acc MGI 1927168
B01	UPFM094858 3	ENSMUST000000 149776.2	Dusp16	ENSMUSG000 000030203	dual specificity phosphatase 16 Source MGI Symbol Acc MGI 1917936
B02	UPFM073261 6	ENSMUST000000 220748.1	Dusp22	ENSMUSG000 000069255	dual specificity phosphatase 22 Source MGI Symbol Acc MGI 1915926
B03	UPFM065428 8	ENSMUST000000 027826.6	Dusp23	ENSMUSG000 000026544	dual specificity phosphatase 23 Source MGI Symbol Acc MGI 1915690
B04	UPFM071545 3	ENSMUST000000 170204.7	Dusp26	ENSMUSG000 000039661	dual specificity phosphatase 26 (putative) Source MGI Symbol Acc MGI 1914209
B05	UPFM094107 5	ENSMUST000000 125794.1	Dusp3	ENSMUSG000 000003518	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) Source MGI Symbol Acc MGI 1919599
B06	UPFM083593 0	ENSMUST000000 033930.4	Dusp4	ENSMUSG000 000031530	dual specificity phosphatase 4 Source MGI Symbol Acc MGI 2442191
B07	UPFM088626 4	ENSMUST000000 038287.6	Dusp5	ENSMUSG000 000034765	dual specificity phosphatase 5 Source MGI Symbol Acc MGI 2685183
B08	UPFM066528 7	ENSMUST000000 220291.1	Dusp6	ENSMUSG000 000019960	dual specificity phosphatase 6 Source MGI Symbol Acc MGI 1914853
B09	UPFM090600 1	ENSMUST000000 173051.1	Dusp7	ENSMUSG000 000053716	dual specificity phosphatase 7 Source MGI Symbol Acc MGI 2387100
B10	UPFM077892 5	ENSMUST000000 143661.1	Dusp8	ENSMUSG000 000037887	dual specificity phosphatase 8 Source MGI Symbol Acc MGI 106626
B11	UPFM071428 0	ENSMUST000000 019701.8	Dusp9	ENSMUSG000 000031383	dual specificity phosphatase 9 Source MGI Symbol Acc MGI 2387107
B12	UPFM061780 1	ENSMUST000000 185886.6	Ilkap	ENSMUSG000 000026309	integrin-linked kinase-associated serine/threonine phosphatase 2C Source MGI Symbol Acc MGI 1914694
C01	UPFM071104 7	ENSMUST000000 108301.7	Pdp1	ENSMUSG000 000049225	pyruvate dehydrogenase phosphatase catalytic subunit 1 Source MGI Symbol Acc MGI 2685870
C02	UPFM093863 4	ENSMUST000000 061047.6	Phlpp1	ENSMUSG000 000044340	PH domain and leucine rich repeat protein phosphatase 1 Source MGI Symbol Acc MGI 2138327
C03	UPFM080055 2	ENSMUST000000 071204.11	Ppef1	ENSMUSG000 000062168	protein phosphatase with EF hand calcium-binding domain 1 Source MGI Symbol Acc MGI 1097157
C04	UPFM065911 1	ENSMUST000000 221628.1	Ppm1a	ENSMUSG000 000021096	protein phosphatase 1A, magnesium dependent, alpha isoform Source MGI Symbol Acc MGI 99878
C05	UPFM098425 7	ENSMUST000000 112305.9	Ppm1b	ENSMUSG000 000061130	protein phosphatase 1B, magnesium dependent, beta isoform Source MGI Symbol Acc MGI 101841
C06	UPFM093744 8	ENSMUST000000 020835.15	Ppm1d	ENSMUSG000 000020525	protein phosphatase 1D magnesium-dependent, delta isoform Source MGI Symbol Acc MGI 1858214
C07	UPFM077904 4	ENSMUST000000 232247.1	Ppm1f	ENSMUSG000 000026181	protein phosphatase 1F (PP2C domain containing) Source MGI Symbol Acc MGI 1918464
C08	UPFM099412 4	ENSMUST000000 200778.4	Ppm1g	ENSMUSG000 000029147	protein phosphatase 1G (formerly 2C), magnesium-dependent, gamma isoform Source MGI Symbol Acc MGI 106065
C09	UPFM078570 9	ENSMUST000000 236181.1	Ppp1ca	ENSMUSG000 000040385	protein phosphatase 1 catalytic subunit alpha Source MGI Symbol Acc MGI 103016
C10	UPFM063808 3	ENSMUST000000 201880.1	Ppp1cb	ENSMUSG000 000014956	protein phosphatase 1 catalytic subunit beta Source MGI Symbol Acc MGI 104871
	UPFM098672	ENSMUST000000		ENSMUSG000	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform Source

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	6	020608.2	Ppp2ca	000020349	MGI Symbol Acc MGI 1321159
C12	UPFM071551 4	ENSMUST00000 009774.10	Ppp2cb	ENSMUSG00 000009630	protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform Source MGI Symbol Acc MGI 1321161
D01	UPFM100594 6	ENSMUST00000 070198.13	Ppp3ca	ENSMUSG00 000028161	protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164
D02	UPFM100358 3	ENSMUST00000 159027.7	Ppp3cb	ENSMUSG00 000021816	protein phosphatase 3, catalytic subunit, beta isoform Source MGI Symbol Acc MGI 107163
D03	UPFM100914 6	ENSMUST00000 078434.7	Ppp3cc	ENSMUSG00 000022092	protein phosphatase 3, catalytic subunit, gamma isoform Source MGI Symbol Acc MGI 107162
D04	UPFM069545 9	ENSMUST00000 206353.1	Ppp4c	ENSMUSG00 000030697	protein phosphatase 4, catalytic subunit Source MGI Symbol Acc MGI 1891763
D05	UPFM076864 2	ENSMUST00000 138353.7	Ppp5c	ENSMUSG00 000003099	protein phosphatase 5, catalytic subunit Source MGI Symbol Acc MGI 102666
D06	UPFM089742 6	ENSMUST00000 013807.7	Pten	ENSMUSG00 000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
D07	UPFM069863 2	ENSMUST00000 076587.5	Ptp4a1	ENSMUSG00 000117310	protein tyrosine phosphatase 4a1 Source NCBI gene Acc 19243
D08	UPFM095558 7	ENSMUST00000 133662.1	Ptp4a2	ENSMUSG00 000028788	protein tyrosine phosphatase 4a2 Source MGI Symbol Acc MGI 1277117
D09	UPFM082059 3	ENSMUST00000 163582.8	Ptp4a3	ENSMUSG00 000059895	protein tyrosine phosphatase 4a3 Source MGI Symbol Acc MGI 1277098
D10	UPFM063367 6	ENSMUST00000 091429.11	Hacd1	ENSMUSG00 000063275	3-hydroxyacyl-CoA dehydratase 1 Source MGI Symbol Acc MGI 1353592
D11	UPFM096458 5	ENSMUST00000 147210.7	Ptpn1	ENSMUSG00 000027540	protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805
D12	UPFM092286 3	ENSMUST00000 100770.8	Ptpn11	ENSMUSG00 000043733	protein tyrosine phosphatase, non-receptor type 11 Source MGI Symbol Acc MGI 99511
E01	UPFM078780 6	ENSMUST00000 151813.7	Ptpn12	ENSMUSG00 000028771	protein tyrosine phosphatase, non-receptor type 12 Source MGI Symbol Acc MGI 104673
E02	UPFM068974 4	ENSMUST00000 200581.1	Ptpn13	ENSMUSG00 000034573	protein tyrosine phosphatase, non-receptor type 13 Source MGI Symbol Acc MGI 103293
E03	UPFM065862 0	ENSMUST00000 128275.1	Ptpn14	ENSMUSG00 000026604	protein tyrosine phosphatase, non-receptor type 14 Source MGI Symbol Acc MGI 102467
E04	UPFM068199 4	ENSMUST00000 122412.1	Ptpn2	ENSMUSG00 000024539	protein tyrosine phosphatase, non-receptor type 2 Source MGI Symbol Acc MGI 97806
E05	UPFM078437 7	ENSMUST00000 221932.1	Ptpn21	ENSMUSG00 000021009	protein tyrosine phosphatase, non-receptor type 21 Source MGI Symbol Acc MGI 1344406
E06	UPFM087595 5	ENSMUST00000 126548.1	Ptpn22	ENSMUSG00 000027843	protein tyrosine phosphatase, non-receptor type 22 (lymphoid) Source MGI Symbol Acc MGI 107170
E07	UPFM085639 1	ENSMUST00000 040021.11	Ptpn23	ENSMUSG00 000036057	protein tyrosine phosphatase, non-receptor type 23 Source MGI Symbol Acc MGI 2144837
E08	UPFM068787 8	ENSMUST00000 153926.7	Ptpn3	ENSMUSG00 000038764	protein tyrosine phosphatase, non-receptor type 3 Source MGI Symbol Acc MGI 105307
E09	UPFM094665 8	ENSMUST00000 168303.7	Ptpn4	ENSMUSG00 000026384	protein tyrosine phosphatase, non-receptor type 4 Source MGI Symbol Acc MGI 1099792
E10	UPFM066909 5	ENSMUST00000 033142.12	Ptpn5	ENSMUSG00 000030854	protein tyrosine phosphatase, non-receptor type 5 Source MGI Symbol Acc MGI 97807
E11	UPFM100354 0	ENSMUST00000 173228.1	Ptpn6	ENSMUSG00 000004266	protein tyrosine phosphatase, non-receptor type 6 Source MGI Symbol Acc MGI 96055
E12	UPFM068667 2	ENSMUST00000 167080.2	Ptpn7	ENSMUSG00 000031506	protein tyrosine phosphatase, non-receptor type 7 Source MGI Symbol Acc MGI 2156893
F01	UPFM071693 1	ENSMUST00000 034832.7	Ptpn9	ENSMUSG00 000032290	protein tyrosine phosphatase, non-receptor type 9 Source MGI Symbol Acc MGI 1928376
F02	UPFM073320 1	ENSMUST00000 230981.1	Ptpnra	ENSMUSG00 000027303	protein tyrosine phosphatase, receptor type, A Source MGI Symbol Acc MGI 97808
F03	UPFM079943 2	ENSMUST00000 092167.6	Ptpnrb	ENSMUSG00 000020154	protein tyrosine phosphatase, receptor type, B Source MGI Symbol Acc MGI 97809
F04	UPFM080782 6	ENSMUST00000 112036.4	Ptpnrc	ENSMUSG00 000026395	protein tyrosine phosphatase, receptor type, C Source MGI Symbol Acc MGI 97810
F05	UPFM078238 9	ENSMUST00000 107289.8	Ptpnrd	ENSMUSG00 000028399	protein tyrosine phosphatase, receptor type, D Source MGI Symbol Acc MGI 97812
F06	UPFM095911 2	ENSMUST00000 210833.1	Ptpnre	ENSMUSG00 000041836	protein tyrosine phosphatase, receptor type, E Source MGI Symbol Acc MGI 97813
F07	UPFM089174 9	ENSMUST00000 150096.7	Ptpnrf	ENSMUSG00 000033295	protein tyrosine phosphatase, receptor type, F Source MGI Symbol Acc MGI 102695
F08	UPFM086886 2	ENSMUST00000 142917.7	Ptpnrg	ENSMUSG00 000021745	protein tyrosine phosphatase, receptor type, G Source MGI Symbol Acc MGI 97814
F09	UPFM095989 8	ENSMUST00000 166650.2	Ptpnrh	ENSMUSG00 000035429	protein tyrosine phosphatase, receptor type, H Source MGI Symbol Acc MGI 3026877
F10	UPFM085161 1	ENSMUST00000 111493.7	Ptpnrj	ENSMUSG00 000025314	protein tyrosine phosphatase, receptor type, J Source MGI Symbol Acc MGI 104574

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFM093226 2	ENSMUST00000 218633.1	Ptprk	ENSMUSG00 000019889	protein tyrosine phosphatase, receptor type, K Source MGI Symbol Acc MGI 103310
F12	UPFM075568 5	ENSMUST00000 224091.1	Ptprm	ENSMUSG00 000033278	protein tyrosine phosphatase, receptor type, M Source MGI Symbol Acc MGI 102694
G01	UPFM078060 0	ENSMUST00000 186178.6	Ptprn	ENSMUSG00 000026204	protein tyrosine phosphatase, receptor type, N Source MGI Symbol Acc MGI 102765
G02	UPFM069813 4	ENSMUST00000 185505.6	Ptprn2	ENSMUSG00 000056553	protein tyrosine phosphatase, receptor type, N polypeptide 2 Source MGI Symbol Acc MGI 107418
G03	UPFM096234 3	ENSMUST00000 203255.2	Ptpro	ENSMUSG00 000030223	protein tyrosine phosphatase, receptor type, O Source MGI Symbol Acc MGI 1097152
G04	UPFM084693 9	ENSMUST00000 155606.7	Ptprr	ENSMUSG00 000020151	protein tyrosine phosphatase, receptor type, R Source MGI Symbol Acc MGI 109559
G05	UPFM072496 6	ENSMUST00000 086828.9	Ptprs	ENSMUSG00 000013236	protein tyrosine phosphatase, receptor type, S Source MGI Symbol Acc MGI 97815
G06	UPFM068562 4	ENSMUST00000 109442.7	Ptprt	ENSMUSG00 000053141	protein tyrosine phosphatase, receptor type, T Source MGI Symbol Acc MGI 1321152
G07	UPFM092783 4	ENSMUST00000 154224.1	Ptpru	ENSMUSG00 000028909	protein tyrosine phosphatase, receptor type, U Source MGI Symbol Acc MGI 1321151
G08	UPFM062701 0	ENSMUST00000 201827.1	Ptprz1	ENSMUSG00 000068748	protein tyrosine phosphatase, receptor type Z, polypeptide 1 Source MGI Symbol Acc MGI 97816
G09	UPFM077625 4	ENSMUST00000 159510.1	Ssh1	ENSMUSG00 000042121	slingshot protein phosphatase 1 Source MGI Symbol Acc MGI 2686240
G10	UPFM072641 3	ENSMUST00000 030905.8	Ssu72	ENSMUSG00 000029038	Ssu72 RNA polymerase II CTD phosphatase homolog (yeast) Source MGI Symbol Acc MGI 1916241
G11	UPFM081769 2	ENSMUST00000 229592.1	Tns2	ENSMUSG00 000037003	tensin 2 Source MGI Symbol Acc MGI 2387586
G12	UPFM097254 1	ENSMUST00000 211747.1	Tpte	ENSMUSG00 000031481	transmembrane phosphatase with tensin homology Source MGI Symbol Acc MGI 2446460
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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