

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

Mouse Protein Phosphatases

Cat. no. 249950 SBMM-045ZR

For study focus gene expression analysis

Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

Panel layout (Rotor-Gene): QuantiNova LNA 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 PCR System 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	Ptpnri	Ptpnrk	Ptpnrm
G	Ptpnm	Ptpnm2	Ptpnro	Ptpnrr	Ptpnrs	Ptpnrt	Ptpnru	Ptpnrz1	Ssh1	Ssu72	Tns2	Tple
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM1028146	ENSMUST00000219697.1	Acp1	ENSMUSG0000044573	acid phosphatase 1, soluble Source MGI Symbol Acc MGI 87881
A02	SBM0886337	ENSMUST00000150403.7	Acp2	ENSMUSG0000002103	acid phosphatase 2, lysosomal Source MGI Symbol Acc MGI 87882
A03	SBM0740083	ENSMUST00000136994.1	Cdc14a	ENSMUSG0000033502	CDC14 cell division cycle 14A Source MGI Symbol Acc MGI 2442676
A04	SBM0837121	ENSMUST00000039318.15	Cdc14b	ENSMUSG0000033102	CDC14 cell division cycle 14B Source MGI Symbol Acc MGI 2441808
A05	SBM0768186	ENSMUST00000199787.2	Cdc25a	ENSMUSG0000032477	cell division cycle 25A Source MGI Symbol Acc MGI 103198
A06	SBM0756476	ENSMUST00000028804.14	Cdc25b	ENSMUSG0000027330	cell division cycle 25B Source MGI Symbol Acc MGI 99701
A07	SBM0971821	ENSMUST00000060710.8	Cdc25c	ENSMUSG0000044201	cell division cycle 25C Source MGI Symbol Acc MGI 88350
A08	SBM0877525	ENSMUST00000067426.5	Cdkn3	ENSMUSG0000037628	cyclin-dependent kinase inhibitor 3 Source MGI Symbol Acc MGI 1919641
A09	SBM1019762	ENSMUST00000126178.1	Dusp1	ENSMUSG0000024190	dual specificity phosphatase 1 Source MGI Symbol Acc MGI 105120
A10	SBM1051279	ENSMUST00000048655.7	Dusp10	ENSMUSG0000039384	dual specificity phosphatase 10 Source MGI Symbol Acc MGI 1927070
A11	SBM0826200	ENSMUST00000027970.13	Dusp12	ENSMUSG0000026659	dual specificity phosphatase 12 Source MGI Symbol Acc MGI 1890614
A12	SBM0955098	ENSMUST00000018792.11	Dusp14	ENSMUSG0000018648	dual specificity phosphatase 14 Source MGI Symbol Acc MGI 1927168
B01	SBM0741807	ENSMUST00000129433.3	Dusp16	ENSMUSG0000030203	dual specificity phosphatase 16 Source MGI Symbol Acc MGI 1917936
B02	SBM0683320	ENSMUST00000220748.1	Dusp22	ENSMUSG0000069255	dual specificity phosphatase 22 Source MGI Symbol Acc MGI 1915926
B03	SBM1069626	ENSMUST00000027826.6	Dusp23	ENSMUSG0000026544	dual specificity phosphatase 23 Source MGI Symbol Acc MGI 1915690
B04	SBM0949726	ENSMUST00000160700.1	Dusp26	ENSMUSG0000039661	dual specificity phosphatase 26 (putative) Source MGI Symbol Acc MGI 1914209
B05	SBM0723284	ENSMUST00000151678.7	Dusp3	ENSMUSG0000003518	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related) Source MGI Symbol Acc MGI 1919599
B06	SBM1072631	ENSMUST00000033930.4	Dusp4	ENSMUSG0000031530	dual specificity phosphatase 4 Source MGI Symbol Acc MGI 2442191
B07	SBM1005093	ENSMUST00000038287.6	Dusp5	ENSMUSG0000034765	dual specificity phosphatase 5 Source MGI Symbol Acc MGI 2685183
B08	SBM0900505	ENSMUST00000220291.1	Dusp6	ENSMUSG0000019960	dual specificity phosphatase 6 Source MGI Symbol Acc MGI 1914853
B09	SBM0938833	ENSMUST00000173748.1	Dusp7	ENSMUSG0000053716	dual specificity phosphatase 7 Source MGI Symbol Acc MGI 2387100
B10	SBM0993292	ENSMUST00000039926.9	Dusp8	ENSMUSG0000037887	dual specificity phosphatase 8 Source MGI Symbol Acc MGI 106626
B11	SBM1031065	ENSMUST00000019701.8	Dusp9	ENSMUSG0000031383	dual specificity phosphatase 9 Source MGI Symbol Acc MGI 2387107
B12	SBM0822347	ENSMUST00000191230.6	Ilkap	ENSMUSG0000026309	integrin-linked kinase-associated serine/threonine phosphatase 2C Source MGI Symbol Acc MGI 1914694
C01	SBM0690156	ENSMUST00000108297.2	Pdp1	ENSMUSG0000049225	pyruvate dehydrogenase phosphatase catalytic subunit 1 Source MGI Symbol Acc MGI 2685870
C02	SBM1028575	ENSMUST00000135810.2	Phlpp1	ENSMUSG0000044340	PH domain and leucine rich repeat protein phosphatase 1 Source MGI Symbol Acc MGI 2138327
C03	SBM1013533	ENSMUST00000071204.11	Ppef1	ENSMUSG0000062168	protein phosphatase with EF hand calcium-binding domain 1 Source MGI Symbol Acc MGI 1097157
C04	SBM1057712	ENSMUST00000223410.1	Ppm1a	ENSMUSG0000021096	protein phosphatase 1A, magnesium dependent, alpha isoform Source MGI Symbol Acc MGI 99878
C05	SBM0785110	ENSMUST00000112305.9	Ppm1b	ENSMUSG0000061130	protein phosphatase 1B, magnesium dependent, beta isoform Source MGI Symbol Acc MGI 101841
C06	SBM0864740	ENSMUST00000020835.15	Ppm1d	ENSMUSG0000020525	protein phosphatase 1D magnesium-dependent, delta isoform Source MGI Symbol Acc MGI 1858214
C07	SBM0724977	ENSMUST00000232247.1	Ppm1f	ENSMUSG0000026181	protein phosphatase 1F (PP2C domain containing) Source MGI Symbol Acc MGI 1918464
C08	SBM0752135	ENSMUST00000202294.3	Ppm1g	ENSMUSG0000029147	protein phosphatase 1G (formerly 2C), magnesium-dependent, gamma isoform Source MGI Symbol Acc MGI 106065
C09	SBM0679454	ENSMUST00000046094.5	Ppp1ca	ENSMUSG0000040385	protein phosphatase 1 catalytic subunit alpha Source MGI Symbol Acc MGI 103016
C10	SBM1051078	ENSMUST00000202078.1	Ppp1cb	ENSMUSG0000014956	protein phosphatase 1 catalytic subunit beta Source MGI Symbol Acc MGI 104871
		ENSMUST000000		ENSMUSG00	protein phosphatase 2 (formerly 2A), catalytic subunit, alpha isoform Source

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM0974754	020608.2	Ppp2ca	000020349	MGI Symbol Acc MGI 1321159
C12	SBM0862901	ENSMUST00000009774.10	Ppp2cb	ENSMUSG0000009630	protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform Source MGI Symbol Acc MGI 1321161
D01	SBM1084664	ENSMUST00000070198.13	Ppp3ca	ENSMUSG00000028161	protein phosphatase 3, catalytic subunit, alpha isoform Source MGI Symbol Acc MGI 107164
D02	SBM1078561	ENSMUST00000159027.7	Ppp3cb	ENSMUSG00000021816	protein phosphatase 3, catalytic subunit, beta isoform Source MGI Symbol Acc MGI 107163
D03	SBM0928602	ENSMUST00000228265.1	Ppp3cc	ENSMUSG00000022092	protein phosphatase 3, catalytic subunit, gamma isoform Source MGI Symbol Acc MGI 107162
D04	SBM0830192	ENSMUST00000032936.7	Ppp4c	ENSMUSG00000030697	protein phosphatase 4, catalytic subunit Source MGI Symbol Acc MGI 1891763
D05	SBM0874150	ENSMUST00000003183.11	Ppp5c	ENSMUSG0000003099	protein phosphatase 5, catalytic subunit Source MGI Symbol Acc MGI 102666
D06	SBM1220566	ENSMUST00000013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
D07	SBM0784137	ENSMUST00000027232.14	Ptp4a1	ENSMUSG0000117310	protein tyrosine phosphatase 4a1 Source NCBI gene Acc 19243
D08	SBM0933696	ENSMUST00000127558.1	Ptp4a2	ENSMUSG00000028788	protein tyrosine phosphatase 4a2 Source MGI Symbol Acc MGI 1277117
D09	SBM0833924	ENSMUST00000230177.1	Ptp4a3	ENSMUSG00000059895	protein tyrosine phosphatase 4a3 Source MGI Symbol Acc MGI 1277098
D10	SBM1046012	ENSMUST00000091429.11	Hacd1	ENSMUSG00000063275	3-hydroxyacyl-CoA dehydratase 1 Source MGI Symbol Acc MGI 1353592
D11	SBM0939941	ENSMUST00000142717.1	Ptpn1	ENSMUSG00000027540	protein tyrosine phosphatase, non-receptor type 1 Source MGI Symbol Acc MGI 97805
D12	SBM0903021	ENSMUST00000148871.1	Ptpn11	ENSMUSG00000043733	protein tyrosine phosphatase, non-receptor type 11 Source MGI Symbol Acc MGI 99511
E01	SBM0967555	ENSMUST00000199774.4	Ptpn12	ENSMUSG00000028771	protein tyrosine phosphatase, non-receptor type 12 Source MGI Symbol Acc MGI 104673
E02	SBM0778746	ENSMUST00000199412.4	Ptpn13	ENSMUSG00000034573	protein tyrosine phosphatase, non-receptor type 13 Source MGI Symbol Acc MGI 103293
E03	SBM0924820	ENSMUST00000194127.5	Ptpn14	ENSMUSG00000026604	protein tyrosine phosphatase, non-receptor type 14 Source MGI Symbol Acc MGI 102467
E04	SBM1023740	ENSMUST00000122412.1	Ptpn2	ENSMUSG00000024539	protein tyrosine phosphatase, non-receptor type 2 Source MGI Symbol Acc MGI 97806
E05	SBM0827884	ENSMUST00000170188.7	Ptpn21	ENSMUSG00000021009	protein tyrosine phosphatase, non-receptor type 21 Source MGI Symbol Acc MGI 1344406
E06	SBM0918178	ENSMUST00000134373.7	Ptpn22	ENSMUSG00000027843	protein tyrosine phosphatase, non-receptor type 22 (lymphoid) Source MGI Symbol Acc MGI 107170
E07	SBM0891662	ENSMUST00000040021.11	Ptpn23	ENSMUSG00000036057	protein tyrosine phosphatase, non-receptor type 23 Source MGI Symbol Acc MGI 2144837
E08	SBM0965099	ENSMUST00000153926.7	Ptpn3	ENSMUSG00000038764	protein tyrosine phosphatase, non-receptor type 3 Source MGI Symbol Acc MGI 105307
E09	SBM0762279	ENSMUST00000064091.11	Ptpn4	ENSMUSG00000026384	protein tyrosine phosphatase, non-receptor type 4 Source MGI Symbol Acc MGI 1099792
E10	SBM1031422	ENSMUST00000208324.1	Ptpn5	ENSMUSG00000030854	protein tyrosine phosphatase, non-receptor type 5 Source MGI Symbol Acc MGI 97807
E11	SBM1010608	ENSMUST00000172690.1	Ptpn6	ENSMUSG0000004266	protein tyrosine phosphatase, non-receptor type 6 Source MGI Symbol Acc MGI 96055
E12	SBM0863592	ENSMUST00000167080.2	Ptpn7	ENSMUSG00000031506	protein tyrosine phosphatase, non-receptor type 7 Source MGI Symbol Acc MGI 2156893
F01	SBM0871194	ENSMUST00000034832.7	Ptpn9	ENSMUSG00000032290	protein tyrosine phosphatase, non-receptor type 9 Source MGI Symbol Acc MGI 1928376
F02	SBM0895466	ENSMUST00000028769.13	Ptpnra	ENSMUSG00000027303	protein tyrosine phosphatase, receptor type, A Source MGI Symbol Acc MGI 97808
F03	SBM0870636	ENSMUST00000217925.1	Ptpnrb	ENSMUSG00000020154	protein tyrosine phosphatase, receptor type, B Source MGI Symbol Acc MGI 97809
F04	SBM0851018	ENSMUST00000183229.2	Ptpnrc	ENSMUSG00000026395	protein tyrosine phosphatase, receptor type, C Source MGI Symbol Acc MGI 97810
F05	SBM0753233	ENSMUST00000102834.7	Ptpnrd	ENSMUSG00000028399	protein tyrosine phosphatase, receptor type, D Source MGI Symbol Acc MGI 97812
F06	SBM0742111	ENSMUST00000209256.1	Ptpnre	ENSMUSG00000041836	protein tyrosine phosphatase, receptor type, E Source MGI Symbol Acc MGI 97813
F07	SBM1018909	ENSMUST00000123484.1	Ptpnrf	ENSMUSG00000033295	protein tyrosine phosphatase, receptor type, F Source MGI Symbol Acc MGI 102695
F08	SBM0769608	ENSMUST00000223890.1	Ptpnrg	ENSMUSG00000021745	protein tyrosine phosphatase, receptor type, G Source MGI Symbol Acc MGI 97814
F09	SBM0836192	ENSMUST00000205417.1	Ptpnrh	ENSMUSG00000035429	protein tyrosine phosphatase, receptor type, H Source MGI Symbol Acc MGI 3026877
F10	SBM1010422	ENSMUST00000111493.7	Ptpnrj	ENSMUSG00000025314	protein tyrosine phosphatase, receptor type, J Source MGI Symbol Acc MGI 104574

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0756953	ENSMUST00000166468.1	Ptprk	ENSMUSG0000019889	protein tyrosine phosphatase, receptor type, K Source MGI Symbol Acc MGI 103310
F12	SBM0742795	ENSMUST00000037974.9	Ptprm	ENSMUSG0000033278	protein tyrosine phosphatase, receptor type, M Source MGI Symbol Acc MGI 102694
G01	SBM0903040	ENSMUST00000189769.6	Ptprn	ENSMUSG0000026204	protein tyrosine phosphatase, receptor type, N Source MGI Symbol Acc MGI 102765
G02	SBM0691500	ENSMUST00000189009.6	Ptprn2	ENSMUSG0000056553	protein tyrosine phosphatase, receptor type, N polypeptide 2 Source MGI Symbol Acc MGI 107418
G03	SBM0797339	ENSMUST00000203914.1	Ptpro	ENSMUSG0000030223	protein tyrosine phosphatase, receptor type, O Source MGI Symbol Acc MGI 1097152
G04	SBM1031621	ENSMUST00000128399.1	Ptpr	ENSMUSG0000020151	protein tyrosine phosphatase, receptor type, R Source MGI Symbol Acc MGI 109559
G05	SBM0760961	ENSMUST00000223783.1	Ptprs	ENSMUSG0000013236	protein tyrosine phosphatase, receptor type, S Source MGI Symbol Acc MGI 97815
G06	SBM1049571	ENSMUST00000109442.7	Ptprt	ENSMUSG0000053141	protein tyrosine phosphatase, receptor type, T Source MGI Symbol Acc MGI 1321152
G07	SBM1049202	ENSMUST00000105987.8	Ptpru	ENSMUSG0000028909	protein tyrosine phosphatase, receptor type, U Source MGI Symbol Acc MGI 1321151
G08	SBM0916090	ENSMUST00000090568.6	Ptprz1	ENSMUSG0000068748	protein tyrosine phosphatase, receptor type Z, polypeptide 1 Source MGI Symbol Acc MGI 97816
G09	SBM1000219	ENSMUST00000159510.1	Ssh1	ENSMUSG0000042121	slingshot protein phosphatase 1 Source MGI Symbol Acc MGI 2686240
G10	SBM0888241	ENSMUST00000105595.1	Ssu72	ENSMUSG0000029038	Ssu72 RNA polymerase II CTD phosphatase homolog (yeast) Source MGI Symbol Acc MGI 1916241
G11	SBM1019313	ENSMUST00000046144.9	Tns2	ENSMUSG0000037003	tensin 2 Source MGI Symbol Acc MGI 2387586
G12	SBM0707310	ENSMUST00000211497.1	Tpte	ENSMUSG0000031481	transmembrane phosphatase with tensin homology Source MGI Symbol Acc MGI 2446460
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG0000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG0000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG0000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG0000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG0000023944	heat shock protein 90 alpha (cytosolic), class B member 1 Source MGI Symbol Acc MGI 96247
H06	SBM1218554	Sybr_MGDC	MGDC	Sybr_MGDC	Mouse Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control

Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 µl QuantiNova SYBR Green RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl QN ROX Reference Dye, 1.9 ml Water	208052

*Larger kit sizes available.

The QuantiNova LNA 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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