

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

## Mouse Prostate Cancer

Cat. no. 249950 SBMM-135ZR

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

	1	2	3	4	5	6	7	8	9	10	11	12
A	Abcb1a	Abcb1b	Acaca	Akt1	Apc	Ar	Arntl	Bcl2	Camkk1	Casp3	Cav2	Ccna1
B	Ccnd1	Ccnd2	Cdh1	Cdkn1a	Cdkn2a	Cln3	Creb1	Dab2ip	Daxx	Ddx11	Dkk3	Dlc1
C	Ecd2	Egrfr	Egr3	Erg	Etv1	Fasn	Foxo1	Gadd45a	Gca	Gnrh1	Gpx3	Gstp1
D	Hai1	Hmgcr	Igf1	Igfbp5	Il6	Int6	Klh13	Klkb1	Lgals4	Loxl1	Mapk1	Max
E	Msx1	Mto1	Ndrg3	Nfkb1	Nlx3-1	Nrip1	Pdpk1	Pes1	Ppp2rlb	Prkab1	Pten	Ptgs1
F	Rarb	Rassf1	Rb1	Rbm39	Rbp1	Scaf11	Sept7	Sfn	Sfrp1	Shbg	Slc5a8	Socs3
G	Sox4	Sreb1l	Stk11	Suprl	Tfpl2	Tgfb1i1	Timp2	Timp3	Tmprss2	Trp53	Usp5	Vegfa
H	Actb	B2m	Gapdh	Gusb	Hsp90ab1	MGDC	Q1C	Q1C	PPC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBM1065613	ENSMUST00000 126846.1	Abcb1a	ENSMUSG00 000040584	ATP-binding cassette, sub-family B (MDR/TAP), member 1A Source MGI Symbol Acc MGI 97570
A02	SBM1012642	ENSMUST00000 009058.9	Abcb1b	ENSMUSG00 000028970	ATP-binding cassette, sub-family B (MDR/TAP), member 1B Source MGI Symbol Acc MGI 97568
A03	SBM0933576	ENSMUST00000 133811.2	Acaca	ENSMUSG00 000020532	acetyl-Coenzyme A carboxylase alpha Source MGI Symbol Acc MGI 108451
A04	SBM1020452	ENSMUST00000 144550.8	Akt1	ENSMUSG00 000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A05	SBM0782035	ENSMUST00000 079362.12	Apc	ENSMUSG00 000005871	APC, WNT signaling pathway regulator Source MGI Symbol Acc MGI 88039
A06	SBM0829583	ENSMUST00000 052837.8	Ar	ENSMUSG00 000046532	androgen receptor Source MGI Symbol Acc MGI 88064
A07	SBM1062547	ENSMUST00000 047321.8	Arntl	ENSMUSG00 000055116	aryl hydrocarbon receptor nuclear translocator-like Source MGI Symbol Acc MGI 1096381
A08	SBM0876340	ENSMUST00000 189999.1	Bcl2	ENSMUSG00 000057329	B cell leukemia/lymphoma 2 Source MGI Symbol Acc MGI 88138
A09	SBM1057268	ENSMUST00000 145834.1	Camkk1	ENSMUSG00 000020785	calcium/calmodulin-dependent protein kinase kinase 1, alpha Source MGI Symbol Acc MGI 1891766
A10	SBM0732165	ENSMUST00000 093517.6	Casp3	ENSMUSG00 000031628	caspase 3 Source MGI Symbol Acc MGI 107739
A11	SBM0700536	ENSMUST00000 115462.1	Cav2	ENSMUSG00 000000058	caveolin 2 Source MGI Symbol Acc MGI 107571
A12	SBM0877611	ENSMUST00000 197238.4	Ccnal	ENSMUSG00 000027793	cyclin A1 Source MGI Symbol Acc MGI 108042
B01	SBM0706150	ENSMUST00000 093962.4	Ccnd1	ENSMUSG00 000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B02	SBM0977018	ENSMUST00000 201066.1	Ccnd2	ENSMUSG00 000000184	cyclin D2 Source MGI Symbol Acc MGI 88314
B03	SBM0815100	ENSMUST00000 136580.1	Cdh1	ENSMUSG00 000000303	cadherin 1 Source MGI Symbol Acc MGI 88354
B04	SBM1034022	ENSMUST00000 023829.7	Cdkn1a	ENSMUSG00 000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B05	SBM0998051	ENSMUST00000 060501.4	Cdkn2a	ENSMUSG00 000044303	cyclin dependent kinase inhibitor 2A Source MGI Symbol Acc MGI 104738
B06	SBM0945049	ENSMUST00000 150587.7	Cln3	ENSMUSG00 000030720	ceroid lipofuscinosis, neuronal 3, juvenile (Batten, Spielmeyer-Vogt disease) Source MGI Symbol Acc MGI 107537
B07	SBM0735214	ENSMUST00000 188855.6	Creb1	ENSMUSG00 000025958	cAMP responsive element binding protein 1 Source MGI Symbol Acc MGI 88494
B08	SBM0854213	ENSMUST00000 112987.7	Dab2ip	ENSMUSG00 000026883	disabled 2 interacting protein Source MGI Symbol Acc MGI 1916851
B09	SBM0848719	ENSMUST00000 173626.7	Daxx	ENSMUSG00 000002307	Fas death domain-associated protein Source MGI Symbol Acc MGI 1197015
B10	SBM1072320	ENSMUST00000 225687.1	Ddx11	ENSMUSG00 000035842	DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11 Source MGI Symbol Acc MGI 2443590
B11	SBM0939228	ENSMUST00000 033036.6	Dkk3	ENSMUSG00 000030772	dickkopf WNT signaling pathway inhibitor 3 Source MGI Symbol Acc MGI 1354952
B12	SBM0673932	ENSMUST00000 145245.1	Dlc1	ENSMUSG00 000031523	deleted in liver cancer 1 Source MGI Symbol Acc MGI 1354949
C01	SBM0861628	ENSMUST00000 175857.1	Ect2	ENSMUSG00 000027699	ect2 oncogene Source MGI Symbol Acc MGI 95281
C02	SBM1033270	ENSMUST00000 020329.12	Egfr	ENSMUSG00 000020122	epidermal growth factor receptor Source MGI Symbol Acc MGI 95294
C03	SBM0735904	ENSMUST00000 035908.2	Egr3	ENSMUSG00 000033730	early growth response 3 Source MGI Symbol Acc MGI 1306780
C04	SBM0906391	ENSMUST00000 233881.1	Erg	ENSMUSG00 000040732	ETS transcription factor Source MGI Symbol Acc MGI 95415
C05	SBM0829411	ENSMUST00000 162563.7	Etv1	ENSMUSG00 000004151	ets variant 1 Source MGI Symbol Acc MGI 99254
C06	SBM1047932	ENSMUST00000 206589.1	Fasn	ENSMUSG00 000025153	fatty acid synthase Source MGI Symbol Acc MGI 95485
C07	SBM0795258	ENSMUST00000 053764.6	Foxo1	ENSMUSG00 000044167	forkhead box O1 Source MGI Symbol Acc MGI 1890077
C08	SBM0962210	ENSMUST00000 151958.1	Gadd45a	ENSMUSG00 000036390	growth arrest and DNA-damage-inducible 45 alpha Source MGI Symbol Acc MGI 107799
C09	SBM0711163	ENSMUST00000 028257.2	Gca	ENSMUSG00 000026893	grancalcin Source MGI Symbol Acc MGI 1918521
C10	SBM0802854	ENSMUST00000 111095.3	Gnrh1	ENSMUSG00 000015812	gonadotropin releasing hormone 1 Source MGI Symbol Acc MGI 95789
		ENSMUST00000		ENSMUSG00	

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
C11	SBM0906281	149324.1	Gpx3	ENSMUSG000018339	glutathione peroxidase 3 Source MGI Symbol Acc MGI 105102
C12	SBM1021264	ENSMUST00000 237239.1	Gstp1	ENSMUSG0000060803	glutathione S-transferase, pi 1 Source MGI Symbol Acc MGI 95865
D01	SBM0804190	ENSMUST00000 016031.13	Hal	ENSMUSG0000020017	histidine ammonia lyase Source MGI Symbol Acc MGI 96010
D02	SBM0852758	ENSMUST00000 169196.7	Hmgcr	ENSMUSG0000021670	3-hydroxy-3-methylglutaryl-Coenzyme A reductase Source MGI Symbol Acc MGI 96159
D03	SBM1026650	ENSMUST00000 122386.7	Igf1	ENSMUSG0000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D04	SBM1004323	ENSMUST00000 137339.1	Igfbp5	ENSMUSG0000026185	insulin-like growth factor binding protein 5 Source MGI Symbol Acc MGI 96440
D05	SBM0742623	ENSMUST00000 026845.11	Il6	ENSMUSG0000025746	interleukin 6 Source MGI Symbol Acc MGI 96559
D06	SBM1000284	ENSMUST00000 053959.6	Ints6	ENSMUSG0000035161	integrator complex subunit 6 Source MGI Symbol Acc MGI 1202397
D07	SBM0769173	ENSMUST00000 115319.8	Klhl13	ENSMUSG0000036782	kelch-like 13 Source MGI Symbol Acc MGI 1914705
D08	SBM0919517	ENSMUST00000 026907.5	Klkb1	ENSMUSG0000109764	kallikrein B, plasma 1 Source MGI Symbol Acc MGI 102849
D09	SBM0846568	ENSMUST00000 208971.1	Lgals4	ENSMUSG0000053964	lectin, galactose binding, soluble 4 Source MGI Symbol Acc MGI 107536
D10	SBM0898252	ENSMUST00000 061799.9	Loxl1	ENSMUSG0000032334	lysyl oxidase-like 1 Source MGI Symbol Acc MGI 106096
D11	SBM0800614	ENSMUST00000 231821.1	Mapk1	ENSMUSG0000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
D12	SBM0734133	ENSMUST00000 218640.1	Max	ENSMUSG0000059436	Max protein Source MGI Symbol Acc MGI 96921
E01	SBM0852441	ENSMUST00000 063116.9	Msx1	ENSMUSG0000048450	msh homeobox 1 Source MGI Symbol Acc MGI 97168
E02	SBM0849273	ENSMUST00000 133002.1	Mto1	ENSMUSG0000032342	mitochondrial tRNA translation optimization 1 Source MGI Symbol Acc MGI 1915541
E03	SBM0686946	ENSMUST00000 126627.1	Ndrg3	ENSMUSG0000027634	N-myc downstream regulated gene 3 Source MGI Symbol Acc MGI 1352499
E04	SBM0841870	ENSMUST00000 164430.6	Nfkb1	ENSMUSG0000021863	nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 Source MGI Symbol Acc MGI 97312
E05	SBM1040005	ENSMUST00000 022646.8	Nkx3-1	ENSMUSG000002061	NK3 homeobox 1 Source MGI Symbol Acc MGI 97352
E06	SBM0719826	ENSMUST00000 128871.1	Nrip1	ENSMUSG0000048490	nuclear receptor interacting protein 1 Source MGI Symbol Acc MGI 1315213
E07	SBM0716432	ENSMUST00000 115409.8	Pdkp1	ENSMUSG0000024122	3-phosphoinositide dependent protein kinase 1 Source MGI Symbol Acc MGI 1338068
E08	SBM0966199	ENSMUST00000 137544.1	Pes1	ENSMUSG0000020430	pescadillo ribosomal biogenesis factor 1 Source MGI Symbol Acc MGI 1890613
E09	SBM0723007	ENSMUST00000 034560.13	Ppp2r1b	ENSMUSG0000032058	protein phosphatase 2, regulatory subunit A, beta Source MGI Symbol Acc MGI 1920949
E10	SBM0933984	ENSMUST00000 141018.1	Prkab1	ENSMUSG0000029513	protein kinase, AMP-activated, beta 1 non-catalytic subunit Source MGI Symbol Acc MGI 1336167
E11	SBM1220566	ENSMUST00000 013807.7	Pten	ENSMUSG0000013663	phosphatase and tensin homolog Source MGI Symbol Acc MGI 109583
E12	SBM0775877	ENSMUST00000 149930.2	Ptgs1	ENSMUSG0000047250	prostaglandin-endoperoxide synthase 1 Source MGI Symbol Acc MGI 97797
F01	SBM0779402	ENSMUST00000 223576.1	Rarb	ENSMUSG0000017491	retinoic acid receptor, beta Source MGI Symbol Acc MGI 97857
F02	SBM0972716	ENSMUST00000 121635.6	Rassf1	ENSMUSG0000010067	Ras association (RalGDS/AF-6) domain family member 1 Source MGI Symbol Acc MGI 1928386
F03	SBM0795530	ENSMUST00000 168495.1	Rb1	ENSMUSG0000022105	RB transcriptional corepressor 1 Source MGI Symbol Acc MGI 97874
F04	SBM0813238	ENSMUST00000 155837.7	Rbm39	ENSMUSG0000027620	RNA binding motif protein 39 Source MGI Symbol Acc MGI 2157953
F05	SBM0699882	ENSMUST00000 052068.10	Rbp1	ENSMUSG0000046402	retinol binding protein 1, cellular Source MGI Symbol Acc MGI 97876
F06	SBM1020110	ENSMUST00000 228535.1	Scaf11	ENSMUSG0000033228	SR-related CTD-associated factor 11 Source MGI Symbol Acc MGI 1919443
F07	SBM0951985	ENSMUST00000 217598.1	Sept7	ENSMUSG000001833	septin 7 Source MGI Symbol Acc MGI 1335094
F08	SBM1012777	ENSMUST00000 057311.3	Sfn	ENSMUSG0000047281	stratifin Source MGI Symbol Acc MGI 1891831
F09	SBM0742478	ENSMUST00000 033952.7	Sfrp1	ENSMUSG0000031548	secreted frizzled-related protein 1 Source MGI Symbol Acc MGI 892014
F10	SBM1043637	ENSMUST00000 005334.2	Shbg	ENSMUSG000005202	sex hormone binding globulin Source MGI Symbol Acc MGI 98295

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0751785	ENSMUST00000 020255.7	Slc5a8	ENSMUSG00 000020062	solute carrier family 5 (iodide transporter), member 8 Source MGI Symbol Acc MGI 2384916
F12	SBM0977814	ENSMUST00000 054002.3	Socs3	ENSMUSG00 000053113	suppressor of cytokine signaling 3 Source MGI Symbol Acc MGI 1201791
G01	SBM1075307	ENSMUST00000 067230.5	Sox4	ENSMUSG00 000076431	SRY (sex determining region Y)-box 4 Source MGI Symbol Acc MGI 98366
G02	SBM0984070	ENSMUST00000 020846.7	Srebf1	ENSMUSG00 000020538	sterol regulatory element binding transcription factor 1 Source MGI Symbol Acc MGI 107606
G03	SBM0873081	ENSMUST00000 213772.1	Stk11	ENSMUSG00 000003068	serine/threonine kinase 11 Source MGI Symbol Acc MGI 1341870
G04	SBM0989529	ENSMUST00000 065388.10	Supl7l	ENSMUSG00 000053134	suppressor of Ty 7-like Source MGI Symbol Acc MGI 1919445
G05	SBM1085441	ENSMUST00000 203257.1	Tfpi2	ENSMUSG00 000029664	tissue factor pathway inhibitor 2 Source MGI Symbol Acc MGI 108543
G06	SBM0744840	ENSMUST00000 168825.7	Tgfb1i1	ENSMUSG00 000030782	transforming growth factor beta 1 induced transcript 1 Source MGI Symbol Acc MGI 102784
G07	SBM0732357	ENSMUST00000 155707.2	Timp2	ENSMUSG00 000017466	tissue inhibitor of metalloproteinase 2 Source MGI Symbol Acc MGI 98753
G08	SBM1025772	ENSMUST00000 132307.1	Timp3	ENSMUSG00 000020044	tissue inhibitor of metalloproteinase 3 Source MGI Symbol Acc MGI 98754
G09	SBM0786762	ENSMUST00000 000395.7	Tmprss2	ENSMUSG00 000000385	transmembrane protease, serine 2 Source MGI Symbol Acc MGI 1354381
G10	SBM0841427	ENSMUST00000 108657.3	Trp53	ENSMUSG00 000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G11	SBM0825049	ENSMUST00000 142058.7	Usp5	ENSMUSG00 000038429	ubiquitin specific peptidase 5 (isopeptidase T) Source MGI Symbol Acc MGI 1347343
G12	SBM1079198	ENSMUST00000 217017.1	Vegfa	ENSMUSG00 000023951	vascular endothelial growth factor A Source MGI Symbol Acc MGI 103178
H01	SBM1220560	ENSMUST00000 100497.10	Actb	ENSMUSG00 000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000 102476.4	B2m	ENSMUSG00 000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000 117757.8	Gapdh	ENSMUSG00 000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000 026613.13	Gusb	ENSMUSG00 000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000 166469.7	Hsp90ab1	ENSMUSG00 000023944	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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