

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

Mouse Primary Cilia

Cat. no. 249950 SBMM-127ZR

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	Adcy3	Adcy7	Ahi1	Akt1	Alms1	Arl13b	Arl6	Avpr2	Axin2	Bbs1	Bbs2	Bbs4
B	Bbs7	Birc	Cc2d2a	Ccnd1	Cdc42	Cdk5rap2	Cdkn1a	Cep290	Dvl1	Dync2li1	Fat4	Fbx1
C	Fos	Fuz	Fzd1	Gli1	Gli2	Gli3	Glis2	Gsk3b	Hnf1b	Htr6	Ifi172	Ifi20
D	Ifi74	Ifi80	Ifi88	Igf1	Ilh	Ins2	Inlu	Invs	Iqcb1	Ilgb1	Kif3a	Kif3b
E	Kras	Lrp2	Map2k1	Mapk1	Mkks	Mks1	Mos	Mtor	Nek8	Nphp1	Nphp3	Otd1
F	Pdgfra	Pik3ca	Pkd1	Pkd2	Pkhd1	Prkca	Ptch1	Ptpn5	Rab23	Rhoa	Rock2	Rpgrip11
G	Shh	Smo	Sstr3	Sufu	Tmem67	Trp53	Tsc1	Tsc2	Ttc8	Vangl2	Wnt9b	Wwtr1
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	SBM1091496	ENSMUST00000124505.7	Adcy3	ENSMUSG0000020654	adenylate cyclase 3 Source MGI Symbol Acc MGI 99675
A02	SBM0758574	ENSMUST00000098521.3	Adcy7	ENSMUSG00000031659	adenylate cyclase 7 Source MGI Symbol Acc MGI 102891
A03	SBM0968378	ENSMUST00000213852.1	Ahi1	ENSMUSG0000019986	Abelson helper integration site 1 Source MGI Symbol Acc MGI 87971
A04	SBM1020452	ENSMUST00000144550.8	Akt1	ENSMUSG0000001729	thymoma viral proto-oncogene 1 Source MGI Symbol Acc MGI 87986
A05	SBM1081565	ENSMUST00000213058.1	Alms1	ENSMUSG00000063810	ALMS1, centrosome and basal body associated Source MGI Symbol Acc MGI 1934606
A06	SBM1038395	ENSMUST00000089289.5	Arl13b	ENSMUSG0000022911	ADP-ribosylation factor-like 13B Source MGI Symbol Acc MGI 1915396
A07	SBM1017283	ENSMUST00000099646.9	Arl6	ENSMUSG00000022722	ADP-ribosylation factor-like 6 Source MGI Symbol Acc MGI 1927136
A08	SBM0698323	ENSMUST00000114395.1	Avpr2	ENSMUSG00000031390	arginine vasopressin receptor 2 Source MGI Symbol Acc MGI 88123
A09	SBM0714773	ENSMUST00000106711.1	Axin2	ENSMUSG00000000142	axin 2 Source MGI Symbol Acc MGI 1270862
A10	SBM0715116	ENSMUST00000237362.1	Bbs1	ENSMUSG0000006464	Bardet-Biedl syndrome 1 (human) Source MGI Symbol Acc MGI 1277215
A11	SBM0756448	ENSMUST00000172347.1	Bbs2	ENSMUSG00000031755	Bardet-Biedl syndrome 2 (human) Source MGI Symbol Acc MGI 2135267
A12	SBM0688862	ENSMUST00000026265.7	Bbs4	ENSMUSG00000025235	Bardet-Biedl syndrome 4 (human) Source MGI Symbol Acc MGI 2143311
B01	SBM0919028	ENSMUST00000108156.8	Bbs7	ENSMUSG00000037325	Bardet-Biedl syndrome 7 (human) Source MGI Symbol Acc MGI 1918742
B02	SBM0704070	ENSMUST00000225662.1	Btrc	ENSMUSG00000025217	beta-transducin repeat containing protein Source MGI Symbol Acc MGI 1338871
B03	SBM0702181	ENSMUST00000048150.14	Cc2d2a	ENSMUSG00000039765	coiled-coil and C2 domain containing 2A Source MGI Symbol Acc MGI 1924487
B04	SBM0706150	ENSMUST00000093962.4	Ccnd1	ENSMUSG00000070348	cyclin D1 Source MGI Symbol Acc MGI 88313
B05	SBM1071094	ENSMUST00000030417.9	Cdc42	ENSMUSG0000006699	cell division cycle 42 Source MGI Symbol Acc MGI 106211
B06	SBM0969170	ENSMUST00000140108.1	Cdk5rap2	ENSMUSG00000039298	CDK5 regulatory subunit associated protein 2 Source MGI Symbol Acc MGI 2384875
B07	SBM1034022	ENSMUST00000023829.7	Cdkn1a	ENSMUSG00000023067	cyclin-dependent kinase inhibitor 1A (P21) Source MGI Symbol Acc MGI 104556
B08	SBM0863144	ENSMUST00000219643.1	Cep290	ENSMUSG0000019971	centrosomal protein 290 Source MGI Symbol Acc MGI 2384917
B09	SBM1047833	ENSMUST00000156997.7	Dvl1	ENSMUSG00000029071	dishevelled segment polarity protein 1 Source MGI Symbol Acc MGI 94941
B10	SBM0885854	ENSMUST00000025101.9	Dync2li1	ENSMUSG00000024253	dynein cytoplasmic 2 light intermediate chain 1 Source MGI Symbol Acc MGI 1913996
B11	SBM0871626	ENSMUST00000129182.1	Fat4	ENSMUSG00000046743	FAT atypical cadherin 4 Source MGI Symbol Acc MGI 3045256
B12	SBM0817574	ENSMUST00000099678.4	Fjx1	ENSMUSG00000075012	four jointed box 1 Source MGI Symbol Acc MGI 1341907
C01	SBM0977461	ENSMUST00000134311.1	Fos	ENSMUSG00000021250	FBJ osteosarcoma oncogene Source MGI Symbol Acc MGI 95574
C02	SBM0884797	ENSMUST00000207485.1	Fuz	ENSMUSG00000011658	fuzzy planar cell polarity protein Source MGI Symbol Acc MGI 1917550
C03	SBM0714051	ENSMUST00000054294.6	Fzd1	ENSMUSG00000044674	frizzled class receptor 1 Source MGI Symbol Acc MGI 1196625
C04	SBM0738831	ENSMUST00000219671.1	Gli1	ENSMUSG00000025407	GLI-Kruppel family member GLI1 Source MGI Symbol Acc MGI 95727
C05	SBM0716475	ENSMUST00000161301.7	Gli2	ENSMUSG00000048402	GLI-Kruppel family member GLI2 Source MGI Symbol Acc MGI 95728
C06	SBM0853730	ENSMUST00000110510.3	Gli3	ENSMUSG00000021318	GLI-Kruppel family member GLI3 Source MGI Symbol Acc MGI 95729
C07	SBM0937109	ENSMUST00000135577.1	Glis2	ENSMUSG00000014303	GLIS family zinc finger 2 Source MGI Symbol Acc MGI 1932535
C08	SBM0862470	ENSMUST00000132057.1	Gsk3b	ENSMUSG00000022812	glycogen synthase kinase 3 beta Source MGI Symbol Acc MGI 1861437
C09	SBM1218389	ENSMUST00000108114.8	Hnf1b	ENSMUSG00000020679	HNF1 homeobox B Source MGI Symbol Acc MGI 98505
C10	SBM0712290	ENSMUST00000105802.7	Htr6	ENSMUSG00000028747	5-hydroxytryptamine (serotonin) receptor 6 Source MGI Symbol Acc MGI 1196627
		ENSMUST000000		ENSMUSG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBM1077750	202589.1	Ifi172	000038564	intraflagellar transport 172 Source MGI Symbol Acc MGI 2682064
C12	SBM0779269	ENSMUST00000137120.7	Ifi20	ENSMUSG0000001105	intraflagellar transport 20 Source MGI Symbol Acc MGI 1915585
D01	SBM0763953	ENSMUST00000030311.10	Ifi74	ENSMUSG0000028576	intraflagellar transport 74 Source MGI Symbol Acc MGI 1914944
D02	SBM0937763	ENSMUST00000169064.7	Ifi80	ENSMUSG00000027778	intraflagellar transport 80 Source MGI Symbol Acc MGI 1915509
D03	SBM1069656	ENSMUST00000122063.7	Ifi88	ENSMUSG00000040040	intraflagellar transport 88 Source MGI Symbol Acc MGI 98715
D04	SBM1026650	ENSMUST00000122386.7	Igf1	ENSMUSG00000020053	insulin-like growth factor 1 Source MGI Symbol Acc MGI 96432
D05	SBM0820771	ENSMUST00000189364.1	Ihh	ENSMUSG0000006538	Indian hedgehog Source MGI Symbol Acc MGI 96533
D06	SBM0867142	ENSMUST00000125933.1	Ins2	ENSMUSG0000000215	insulin II Source MGI Symbol Acc MGI 96573
D07	SBM1010481	ENSMUST00000204176.1	Intu	ENSMUSG0000060798	inturned planar cell polarity protein Source MGI Symbol Acc MGI 2443752
D08	SBM1049658	ENSMUST00000149555.1	Invs	ENSMUSG00000028344	inversin Source MGI Symbol Acc MGI 1335082
D09	SBM0709508	ENSMUST00000023535.3	Iqcb1	ENSMUSG00000022837	IQ calmodulin-binding motif containing 1 Source MGI Symbol Acc MGI 2443764
D10	SBM0691612	ENSMUST00000090006.11	Itgb1	ENSMUSG00000025809	integrin beta 1 (fibronectin receptor beta) Source MGI Symbol Acc MGI 96610
D11	SBM0934099	ENSMUST00000118353.8	Kif3a	ENSMUSG00000018395	kinesin family member 3A Source MGI Symbol Acc MGI 107689
D12	SBM0852969	ENSMUST00000028977.6	Kif3b	ENSMUSG00000027475	kinesin family member 3B Source MGI Symbol Acc MGI 107688
E01	SBM1059793	ENSMUST00000203147.2	Kras	ENSMUSG00000030265	Kirsten rat sarcoma viral oncogene homolog Source MGI Symbol Acc MGI 96680
E02	SBM1042339	ENSMUST00000100051.8	Lrp2	ENSMUSG00000027070	low density lipoprotein receptor-related protein 2 Source MGI Symbol Acc MGI 95794
E03	SBM1025120	ENSMUST00000005066.8	Map2k1	ENSMUSG00000004936	mitogen-activated protein kinase kinase 1 Source MGI Symbol Acc MGI 1346866
E04	SBM0800614	ENSMUST00000231821.1	Mapk1	ENSMUSG00000063358	mitogen-activated protein kinase 1 Source MGI Symbol Acc MGI 1346858
E05	SBM0779629	ENSMUST00000028730.12	Mkks	ENSMUSG00000027274	McKusick-Kaufman syndrome Source MGI Symbol Acc MGI 1891836
E06	SBM0788466	ENSMUST00000130135.7	Mks1	ENSMUSG00000034121	Meckel syndrome, type 1 Source MGI Symbol Acc MGI 3584243
E07	SBM0936407	ENSMUST00000105158.1	Mos	ENSMUSG00000078365	Moloney sarcoma oncogene Source MGI Symbol Acc MGI 97052
E08	SBM1220565	ENSMUST00000103221.9	Mtor	ENSMUSG00000028991	mechanistic target of rapamycin kinase Source MGI Symbol Acc MGI 1928394
E09	SBM0943930	ENSMUST00000148154.2	Nek8	ENSMUSG00000017405	NIMA (never in mitosis gene a)-related expressed kinase 8 Source MGI Symbol Acc MGI 1890646
E10	SBM0689021	ENSMUST00000148033.1	Nphp1	ENSMUSG00000027378	nephronophthisis 1 (juvenile) homolog (human) Source MGI Symbol Acc MGI 1858233
E11	SBM0775425	ENSMUST00000035167.14	Nphp3	ENSMUSG00000032558	nephronophthisis 3 (adolescent) Source MGI Symbol Acc MGI 1921275
E12	SBM0743160	ENSMUST00000049501.8	Ofd1	ENSMUSG00000040586	OFD1, centriole and centriolar satellite protein Source MGI Symbol Acc MGI 1350328
F01	SBM0852876	ENSMUST00000168162.4	Pdgfra	ENSMUSG00000029231	platelet derived growth factor receptor, alpha polypeptide Source MGI Symbol Acc MGI 97530
F02	SBM0905151	ENSMUST00000108243.7	Pik3ca	ENSMUSG00000027665	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source MGI Symbol Acc MGI 1206581
F03	SBM0973476	ENSMUST00000228581.1	Pkd1	ENSMUSG00000032855	polycystin 1, transient receptor potential channel interacting Source MGI Symbol Acc MGI 97603
F04	SBM0710172	ENSMUST00000130931.1	Pkd2	ENSMUSG00000034462	polycystic kidney disease 2 Source MGI Symbol Acc MGI 1099818
F05	SBM1000344	ENSMUST00000128051.1	Pkhd1	ENSMUSG00000043760	polycystic kidney and hepatic disease 1 Source MGI Symbol Acc MGI 2155808
F06	SBM0890328	ENSMUST00000100302.3	Prkca	ENSMUSG00000050965	protein kinase C, alpha Source MGI Symbol Acc MGI 97595
F07	SBM0724304	ENSMUST00000194663.5	Ptch1	ENSMUSG00000021466	patched 1 Source MGI Symbol Acc MGI 105373
F08	SBM1031422	ENSMUST00000208324.1	Ptpn5	ENSMUSG00000030854	protein tyrosine phosphatase, non-receptor type 5 Source MGI Symbol Acc MGI 97807
F09	SBM0911806	ENSMUST00000138024.7	Rab23	ENSMUSG0000004768	RAB23, member RAS oncogene family Source MGI Symbol Acc MGI 99833
F10	SBM0943773	ENSMUST00000194701.5	Rhoa	ENSMUSG0000007815	ras homolog family member A Source MGI Symbol Acc MGI 1096342

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBM0682617	ENSMUST00000220688.1	Rock2	ENSMUSG00000020580	Rho-associated coiled-coil containing protein kinase 2 Source MGI Symbol Acc MGI 107926
F12	SBM0907551	ENSMUST00000132757.1	Rpgrip1l	ENSMUSG00000033282	Rpgrip1-like Source MGI Symbol Acc MGI 1920563
G01	SBM0959314	ENSMUST00000002708.4	Shh	ENSMUSG00000002633	sonic hedgehog Source MGI Symbol Acc MGI 98297
G02	SBM0921550	ENSMUST00000001812.4	Smo	ENSMUSG00000001761	smoothened, frizzled class receptor Source MGI Symbol Acc MGI 108075
G03	SBM1060992	ENSMUST00000053239.3	Sstr3	ENSMUSG00000044933	somatostatin receptor 3 Source MGI Symbol Acc MGI 98329
G04	SBM0679226	ENSMUST00000039922.12	Sufu	ENSMUSG00000025231	SUFU negative regulator of hedgehog signaling Source MGI Symbol Acc MGI 1345643
G05	SBM1030196	ENSMUST00000151859.1	Tmem67	ENSMUSG00000049488	transmembrane protein 67 Source MGI Symbol Acc MGI 1923928
G06	SBM0841427	ENSMUST00000108657.3	Trp53	ENSMUSG00000059552	transformation related protein 53 Source MGI Symbol Acc MGI 98834
G07	SBM1061191	ENSMUST00000124507.1	Tsc1	ENSMUSG00000026812	tuberous sclerosis 1 Source MGI Symbol Acc MGI 1929183
G08	SBM0757000	ENSMUST00000228412.1	Tsc2	ENSMUSG00000002496	tuberous sclerosis 2 Source MGI Symbol Acc MGI 102548
G09	SBM0684437	ENSMUST00000124514.1	Ttc8	ENSMUSG00000021013	tetratricopeptide repeat domain 8 Source MGI Symbol Acc MGI 1923510
G10	SBM1043500	ENSMUST00000111263.8	Vangl2	ENSMUSG00000026556	VANGL planar cell polarity 2 Source MGI Symbol Acc MGI 2135272
G11	SBM0905516	ENSMUST00000018630.2	Wnt9b	ENSMUSG00000018486	wingless-type MMTV integration site family, member 9B Source MGI Symbol Acc MGI 1197020
G12	SBM0869638	ENSMUST00000029380.13	Wwtr1	ENSMUSG00000027803	WW domain containing transcription regulator 1 Source MGI Symbol Acc MGI 1917649
H01	SBM1220560	ENSMUST00000100497.10	Actb	ENSMUSG00000029580	actin, beta Source MGI Symbol Acc MGI 87904
H02	SBM0675336	ENSMUST00000102476.4	B2m	ENSMUSG00000060802	beta-2 microglobulin Source MGI Symbol Acc MGI 88127
H03	SBM1220562	ENSMUST00000117757.8	Gapdh	ENSMUSG00000057666	glyceraldehyde-3-phosphate dehydrogenase Source MGI Symbol Acc MGI 95640
H04	SBM1220563	ENSMUST00000026613.13	Gusb	ENSMUSG00000025534	glucuronidase, beta Source MGI Symbol Acc MGI 95872
H05	SBM1220564	ENSMUST00000166469.7	Hsp90ab1	ENSMUSG00000023944	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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