QuantiNova® LNA® Probe PCR Focus Panels (96-Well Format and 384-Well [4 x 96] Format)

Rat Skeletal Muscle: Myogenesis & Myopathy

Cat. no. 249955 UPRN-099ZA

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 (96-well): QuantiNova LNA Probe PCR Focus Panel

For the 384-well (4 × 96) PCR panels, genes are present in a staggered format. 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	Acta1	Actn3	Acvr2b	Adipoq	Adrb2	Agrn	Akt1	Akt2	AABR07005775.1	Bcl2	Bmp4	Camk2g
B	Capn2	Capn3	Casp3	Cast	Cav1	Cav3	Cryab	Cs	Ctnnb1	Dag1	Des	Dmd
C	Dmpk	Dysf	Emd	Fbxo32	Fgf2	Foxo3	Hdac5	Hk2	Igf1	Igf2	Igfbp3	Igfbp5
D	Ikbkb	Il1b	Il6	Lep	Lmna	Mapk1	Mapk14	Mapk3	Mapk8	Mb	Mbnl1	Mef2c
E	Mmp9	Mstn	Musk	Myf5	Myf6	Myh3	Myh1	Myod1	Myog	LOC100909761	Neb	Nfkb1
F	Nos2	Pax3	Pdk4	Pparg	Ppargc1a	Ppargc1b	Ppp3ca	Prkaa1	Prkab2	Kmt2d	Prkag3	Rhoa
G	Rps6kb1	Sgca	Slc2a4	Tgfb1	LOC103694380	Tnnc1	Tnni2	Tnnt1	Tnnt3	Trim63	AABR07052585.1	Utrn
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1073831	ENSRNOT00000024084.6	Acta1	ENSRNOG00000017786	actin, alpha 1, skeletal muscle Source RGD Symbol Acc 2025
A02	UPFR1098063	ENSRNOT00000026812.5	Actn3	ENSRNOG00000019745	actinin alpha 3 Source RGD Symbol Acc 621792
A03	UPFR1120953	ENSRNOT00000019777.6	Acvr2b	ENSRNOG00000014477	activin A receptor type 2B Source RGD Symbol Acc 2028
A04	UPFR1094195	ENSRNOT00000089988.1	Adipoq	ENSRNOG00000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A05	UPFR1035973	ENSRNOT00000026098.3	Adrb2	ENSRNOG00000019217	adrenoceptor beta 2 Source RGD Symbol Acc 2060
A06	UPFR1109983	ENSRNOT00000045678.5	Agrn	ENSRNOG00000020205	agrin Source RGD Symbol Acc 2067
A07	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG00000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A08	UPFR1088137	ENSRNOT00000025303.3	Akt2	ENSRNOG00000018677	AKT serine/threonine kinase 2 Source RGD Symbol Acc 2082
A09	UPFR1074437	ENSRNOT00000074778.2	AABR07005775.1	ENSRNOG00000047124	
A10	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG00000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
A11	UPFR1013450	ENSRNOT00000083268.1	Bmp4	ENSRNOG00000009694	bone morphogenetic protein 4 Source RGD Symbol Acc 2213
A12	UPFR1112789	ENSRNOT00000066163.4	Camk2g	ENSRNOG00000009783	calcium/calmodulin-dependent protein kinase II gamma Source RGD Symbol Acc 621802
B01	UPFR1035285	ENSRNOT00000045326.3	Capn2	ENSRNOG00000034015	calpain 2 Source RGD Symbol Acc 2268
B02	UPFR1084780	ENSRNOT00000079079.1	Capn3	ENSRNOG00000008609	calpain 3 Source RGD Symbol Acc 2269
B03	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG00000010475	caspase 3 Source RGD Symbol Acc 2275
B04	UPFR1066005	ENSRNOT00000062054.5	Cast	ENSRNOG00000010286	calpastatin Source RGD Symbol Acc 2278
B05	UPFR1012931	ENSRNOT00000078250.1	Cav1	ENSRNOG00000056836	caveolin 1 Source RGD Symbol Acc 2280
B06	UPFR1043780	ENSRNOT00000007601.4	Cav3	ENSRNOG00000005798	caveolin 3 Source RGD Symbol Acc 2281
B07	UPFR1023967	ENSRNOT00000059127.3	Cryab	ENSRNOG00000010524	crystallin, alpha B Source RGD Symbol Acc 2414
B08	UPFR1047280	ENSRNOT00000033726.5	Cs	ENSRNOG00000023520	citrate synthase Source RGD Symbol Acc 620330
B09	UPFR1057605	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG00000054172	catenin beta 1 Source RGD Symbol Acc 70487
B10	UPFR1043850	ENSRNOT00000026327.7	Dag1	ENSRNOG00000019400	dystroglycan 1 Source RGD Symbol Acc 621890
B11	UPFR1062805	ENSRNOT00000026860.4	Des	ENSRNOG00000019810	desmin Source RGD Symbol Acc 620686
B12	UPFR1051278	ENSRNOT00000035692.6	Dmd	ENSRNOG00000046366	dystrophin Source RGD Symbol Acc 2507
C01	UPFR1069510	ENSRNOT00000020428.8	Dmpk	ENSRNOG00000015085	DM1 protein kinase Source RGD Symbol Acc 1309825
C02	UPFR1121363	ENSRNOT00000085765.1	Dysf	ENSRNOG00000032788	dysferlin Source RGD Symbol Acc 1311023
C03	UPFR1030220	ENSRNOT00000080990.1	Emd	ENSRNOG00000058882	emerin Source RGD Symbol Acc 2551
C04	UPFR1082615	ENSRNOT00000010361.3	Fbxo32	ENSRNOG00000006738	F-box protein 32 Source RGD Symbol Acc 620373
C05	UPFR1033121	ENSRNOT00000023388.5	Fgf2	ENSRNOG00000017392	fibroblast growth factor 2 Source RGD Symbol Acc 2609
C06	UPFR1095067	ENSRNOT00000000327.5	Foxo3	ENSRNOG00000000299	forkhead box O3 Source RGD Symbol Acc 1309196
C07	UPFR1070143	ENSRNOT00000055187.4	Hdac5	ENSRNOG00000020905	histone deacetylase 5 Source RGD Symbol Acc 619980
C08	UPFR1093740	ENSRNOT00000008813.3	Hk2	ENSRNOG00000006116	hexokinase 2 Source RGD Symbol Acc 2797
C09	UPFR1050099	ENSRNOT00000038780.6	Igf1	ENSRNOG00000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
C10	UPFR1085899	ENSRNOT00000089171.1	Igf2	ENSRNOG00000020369	insulin-like growth factor 2 Source RGD Symbol Acc 2870
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1013429	088355.1	Igfbp3	000061910	insulin-like growth factor binding protein 3 Source RGD Symbol Acc 2874
C12	UPFR1090111	ENSRNOT00000 079493.1	Igfbp5	ENSRNOG00 000017206	insulin-like growth factor binding protein 5 Source RGD Symbol Acc 2876
D01	UPFR1104220	ENSRNOT00000 025851.4	Ikbkb	ENSRNOG00 000019073	inhibitor of nuclear factor kappa B kinase subunit beta Source RGD Symbol Acc 621375
D02	UPFR1121351	ENSRNOT00000 006308.4	Il1b	ENSRNOG00 000004649	interleukin 1 beta Source RGD Symbol Acc 2891
D03	UPFR1098910	ENSRNOT00000 013732.6	Il6	ENSRNOG00 000010278	interleukin 6 Source RGD Symbol Acc 2901
D04	UPFR1089630	ENSRNOT00000 071926.1	Lep	ENSRNOG00 000045797	leptin Source RGD Symbol Acc 3000
D05	UPFR1040557	ENSRNOT00000 026705.6	Lmna	ENSRNOG00 000019638	lamin A/C Source RGD Symbol Acc 620456
D06	UPFR1055882	ENSRNOT00000 002533.7	Mapk1	ENSRNOG00 000001849	mitogen activated protein kinase 1 Source RGD Symbol Acc 70500
D07	UPFR1036984	ENSRNOT00000 000617.8	Mapk14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D08	UPFR1049954	ENSRNOT00000 087625.1	Mapk3	ENSRNOG00 000053583	mitogen activated protein kinase 3 Source RGD Symbol Acc 3046
D09	UPFR1048766	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
D10	UPFR1024846	ENSRNOT00000 006184.6	Mb	ENSRNOG00 000004583	myoglobin Source RGD Symbol Acc 620411
D11	UPFR1015832	ENSRNOT00000 036808.5	Mbnl1	ENSRNOG00 000014076	muscleblind-like splicing regulator 1 Source RGD Symbol Acc 628668
D12	UPFR1035243	ENSRNOT00000 076239.1	Mef2c	ENSRNOG00 000033134	myocyte enhancer factor 2C Source RGD Symbol Acc 1563119
E01	UPFR1032957	ENSRNOT00000 023965.3	Mmp9	ENSRNOG00 000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
E02	UPFR1114916	ENSRNOT00000 038093.3	Mstn	ENSRNOG00 000021294	myostatin Source RGD Symbol Acc 3115
E03	UPFR1088346	ENSRNOT00000 048457.5	Musk	ENSRNOG00 000033567	muscle associated receptor tyrosine kinase Source RGD Symbol Acc 3211
E04	UPFR1018148	ENSRNOT00000 006453.5	Myf5	ENSRNOG00 000004768	myogenic factor 5 Source RGD Symbol Acc 1308322
E05	UPFR1035994	ENSRNOT00000 006523.5	Myf6	ENSRNOG00 000004878	myogenic factor 6 Source RGD Symbol Acc 3134
E06	UPFR1063204	ENSRNOT00000 004147.5	Myh3	ENSRNOG00 000046276	myosin heavy chain 3 Source RGD Symbol Acc 3138
E07	UPFR1019653	ENSRNOT00000 085582.1	Myh1	ENSRNOG00 000049695	myosin heavy chain 1 Source RGD Symbol Acc 735061
E08	UPFR1080604	ENSRNOT00000 015109.2	Myod1	ENSRNOG00 000011306	myogenic differentiation 1 Source RGD Symbol Acc 631429
E09	UPFR1048255	ENSRNOT00000 042046.1	Myog	ENSRNOG00 000030743	myogenin Source RGD Symbol Acc 620432
E10	UPFR1050238	ENSRNOT00000 093356.1	LOC10090 9761	ENSRNOG00 000047186	myotilin-like Source RGD Symbol Acc 6487654
E11	UPFR1039409	ENSRNOT00000 076095.2	Neb	ENSRNOG00 000006783	nebulin Source RGD Symbol Acc 1311134
E12	UPFR1116688	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
F01	UPFR1092405	ENSRNOT00000 016133.6	Nos2	ENSRNOG00 000057443	similar to Nitric oxide synthase, inducible (NOS type II) (Inducible NO synthase) (Inducible NOS) (iNOS) Source RGD Symbol Acc 1598227
F02	UPFR1040215	ENSRNOT00000 018652.5	Pax3	ENSRNOG00 000013670	paired box 3 Source RGD Symbol Acc 620431
F03	UPFR1112759	ENSRNOT00000 012760.4	Pdk4	ENSRNOG00 000009565	pyruvate dehydrogenase kinase 4 Source RGD Symbol Acc 69061
F04	UPFR1091351	ENSRNOT00000 051858.5	Pparg	ENSRNOG00 000008839	peroxisome proliferator-activated receptor gamma Source RGD Symbol Acc 3371
F05	UPFR1107303	ENSRNOT00000 006071.5	Ppargc1a	ENSRNOG00 000004473	PPARG coactivator 1 alpha Source RGD Symbol Acc 620925
F06	UPFR1114270	ENSRNOT00000 023661.5	Ppargc1b	ENSRNOG00 000017503	PPARG coactivator 1 beta Source RGD Symbol Acc 727948
F07	UPFR1110596	ENSRNOT00000 047975.5	Ppp3ca	ENSRNOG00 000009882	protein phosphatase 3 catalytic subunit alpha Source RGD Symbol Acc 3382
F08	UPFR1073875	ENSRNOT00000 017626.5	Prkaa1	ENSRNOG00 000012799	protein kinase AMP-activated catalytic subunit alpha 1 Source RGD Symbol Acc 3387
F09	UPFR1070754	ENSRNOT00000 086588.1	Prkab2	ENSRNOG00 000018166	protein kinase AMP-activated non-catalytic subunit beta 2 Source RGD Symbol Acc 620905
F10	UPFR1057561	ENSRNOT00000 077502.1	Kmt2d	ENSRNOG00 000061499	protein kinase AMP-activated non-catalytic subunit gamma 1 Source RGD Symbol Acc 3388

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1119563	ENSRNOT00000023365.5	Prkag3	ENSRNOG00000017248	protein kinase AMP-activated non-catalytic subunit gamma 3 Source RGD Symbol Acc 1308698
F12	UPFR1119707	ENSRNOT00000071664.2	Rhoa	ENSRNOG00000050519	ras homolog family member A Source RGD Symbol Acc 619921
G01	UPFR1107808	ENSRNOT00000005226.4	Rps6kb1	ENSRNOG00000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683
G02	UPFR1078061	ENSRNOT00000005381.6	Sgca	ENSRNOG00000003998	sarcoglycan, alpha Source RGD Symbol Acc 1308062
G03	UPFR1026140	ENSRNOT00000023256.5	Slc2a4	ENSRNOG00000017226	solute carrier family 2 member 4 Source RGD Symbol Acc 2711
G04	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
G05	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G06	UPFR1057934	ENSRNOT00000025606.6	Tnnc1	ENSRNOG00000018943	troponin C1, slow skeletal and cardiac type Source RGD Symbol Acc 1309921
G07	UPFR1065784	ENSRNOT00000076140.2	Tnni2	ENSRNOG00000020276	troponin I2, fast skeletal type Source RGD Symbol Acc 62050
G08	UPFR1039365	ENSRNOT00000034957.6	Tnnt1	ENSRNOG00000028041	troponin T1, slow skeletal type Source RGD Symbol Acc 621852
G09	UPFR1098469	ENSRNOT00000080339.1	Tnnt3	ENSRNOG00000020332	troponin T3, fast skeletal type Source RGD Symbol Acc 3883
G10	UPFR1045871	ENSRNOT00000067524.3	Trim63	ENSRNOG00000016543	tripartite motif containing 63 Source RGD Symbol Acc 619964
G11	UPFR1045632	ENSRNOT00000030978.2	AABR07052585.1	ENSRNOG00000022637	
G12	UPFR1065844	ENSRNOT00000016273.5	Utrn	ENSRNOG00000011058	utrophin Source RGD Symbol Acc 3947
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat 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.

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 or can be requested from QIAGEN Technical Services or your local distributor.