

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

## Rat Cell Death PathwayFinder

Cat. no. 249955 UPRN-212ZA

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

	1	2	3	4	5	6	7	8	9	10	11	12
<b>A</b>	LOC1009097 50	Akt1	Apa1	App	Atg12	Atg16l1	Atg3	Atg5	Atg7	Atp6v1g2	Bax	Bcl2
<b>B</b>	Bcl2a1	Bcl2l1	Bcl2l11	Becn1	Birc2	Birc3	Bmf	Casp1	Casp2	Casp3	LOC1036899 77	Casp7
<b>C</b>	Casp9	Cd40	Cd40lg	Cflar	Comm4	Ctsb	Ctss	Cybb	Cyld	Defb1	Dffa	Dpysl4
<b>D</b>	Esr1	Fas	Faslg	Foxi1	Gaa	Gadd45a	Galnt5	Grb2	Hspbap1	Htt	Ifng	Igf1
<b>E</b>	Igf1r	Ins2	Irgm	Kcnp1	Mag	Map1k3a	Mapk8	Api5	Nfkb1	Nol3	Olr1583	Parp1
<b>F</b>	Parp2	Pik3c3	Plen	PVR	Rob25	RGD1311517	Dennd4a	Rps6kb1	Snca	Spata2	Sqstm1	Sycp2
<b>G</b>	Mace1	LOC1036943 80	AABR0701832 3.1	Tnfrsf11b	Tnfrsf1a	Tnfrsf4	Tnfrsf8	Tp53	Traf2	Txn14b	Ulk1	Xiap
<b>H</b>	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	UPFR1117746	ENSRNOT00000042495.5	LOC100909750	ENSRNOG0000047356	tyrosine-protein kinase ABL1-like Source RGD Symbol Acc 6502032
A02	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG0000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	UPFR1031240	ENSRNOT00000010869.6	Apaf1	ENSRNOG0000008022	apoptotic peptidase activating factor 1 Source RGD Symbol Acc 620575
A04	UPFR1021296	ENSRNOT00000044081.5	App	ENSRNOG0000006997	amyloid beta precursor protein Source RGD Symbol Acc 2139
A05	UPFR1044325	ENSRNOT00000000170.5	Atg12	ENSRNOG0000000157	autophagy related 12 Source RGD Symbol Acc 1306306
A06	UPFR1043441	ENSRNOT00000080482.1	Atg16l1	ENSRNOG0000017913	autophagy related 16-like 1 Source RGD Symbol Acc 1310631
A07	UPFR1110378	ENSRNOT00000002906.6	Atg3	ENSRNOG0000002094	autophagy related 3 Source RGD Symbol Acc 708464
A08	UPFR1058111	ENSRNOT00000080283.1	Atg5	ENSRNOG0000000322	autophagy related 5 Source RGD Symbol Acc 1359580
A09	UPFR1095782	ENSRNOT00000067532.2	Atg7	ENSRNOG0000007486	autophagy related 7 Source RGD Symbol Acc 1304817
A10	UPFR1170169	ENSRNOT00000001114.5	Atp6v1g2	ENSRNOG0000000840	ATPase H+ transporting V1 subunit G2 Source RGD Symbol Acc 1303186
A11	UPFR1074536	ENSRNOT00000028328.5	Bax	ENSRNOG0000020876	BCL2 associated X, apoptosis regulator Source RGD Symbol Acc 2192
A12	UPFR1082998	ENSRNOT00000003768.2	Bcl2	ENSRNOG0000002791	BCL2, apoptosis regulator Source RGD Symbol Acc 2199
B01	UPFR1064713	ENSRNOT00000039850.3	Bcl2a1	ENSRNOG0000047606	BCL2-related protein A1 Source RGD Symbol Acc 620621
B02	UPFR1047186	ENSRNOT00000010762.7	Bcl2l1	ENSRNOG0000007946	Bcl2-like 1 Source RGD Symbol Acc 2200
B03	UPFR1027475	ENSRNOT00000022596.6	Bcl2l11	ENSRNOG0000016551	BCL2 like 11 Source RGD Symbol Acc 628774
B04	UPFR1048185	ENSRNOT00000027868.7	Becn1	ENSRNOG0000020513	beclin 1 Source RGD Symbol Acc 620190
B05	UPFR1050093	ENSRNOT00000014560.6	Birc2	ENSRNOG0000010602	baculoviral IAP repeat-containing 2 Source RGD Symbol Acc 620690
B06	UPFR1015683	ENSRNOT00000007702.7	Birc3	ENSRNOG0000005731	baculoviral IAP repeat-containing 3 Source RGD Symbol Acc 621282
B07	UPFR1060227	ENSRNOT00000010381.4	Bmf	ENSRNOG0000007529	Bcl2 modifying factor Source RGD Symbol Acc 628658
B08	UPFR1052168	ENSRNOT00000009993.6	Casp1	ENSRNOG0000007372	caspase 1 Source RGD Symbol Acc 2274
B09	UPFR1065838	ENSRNOT00000022543.5	Casp2	ENSRNOG0000016707	caspase 2 Source RGD Symbol Acc 69274
B10	UPFR1091664	ENSRNOT00000014095.5	Casp3	ENSRNOG0000010475	caspase 3 Source RGD Symbol Acc 2275
B11	UPFR1056354	ENSRNOT00000078017.1	LOC103689977	ENSRNOG0000052613	caspase 6 Source RGD Symbol Acc 70967
B12	UPFR1051332	ENSRNOT00000080511.1	Casp7	ENSRNOG0000056216	caspase 7 Source RGD Symbol Acc 620944
C01	UPFR1054782	ENSRNOT00000085378.1	Casp9	ENSRNOG0000012944	caspase 9 Source RGD Symbol Acc 61867
C02	UPFR1023025	ENSRNOT00000055148.4	Cd40	ENSRNOG0000018488	CD40 molecule Source RGD Symbol Acc 619830
C03	UPFR1038741	ENSRNOT00000001162.4	Cd40lg	ENSRNOG0000000871	CD40 ligand Source RGD Symbol Acc 708418
C04	UPFR1108095	ENSRNOT00000016730.5	Cflar	ENSRNOG0000012473	CASP8 and FADD-like apoptosis regulator Source RGD Symbol Acc 620847
C05	UPFR1100460	ENSRNOT00000064903.1	Comm4	ENSRNOG0000018671	COMM domain containing 4 Source RGD Symbol Acc 1306104
C06	UPFR1121227	ENSRNOT00000014177.5	Ctsb	ENSRNOG0000010331	cathepsin B Source RGD Symbol Acc 621509
C07	UPFR1035779	ENSRNOT00000028732.7	Ctss	ENSRNOG0000021157	cathepsin S Source RGD Symbol Acc 621513
C08	UPFR1106648	ENSRNOT00000038994.3	Cybb	ENSRNOG0000003622	cytochrome b-245 beta chain Source RGD Symbol Acc 620574
C09	UPFR1107889	ENSRNOT00000018888.7	Cyld	ENSRNOG0000014048	CYLD lysine 63 deubiquitinase Source RGD Symbol Acc 1308346
C10	UPFR1024658	ENSRNOT00000018427.4	Defb1	ENSRNOG0000013768	defensin beta 1 Source RGD Symbol Acc 619943
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1092379	089179.1	Dffa	000013603	DNA fragmentation factor subunit alpha Source RGD Symbol Acc 620334
C12	UPFR1073710	ENSRNOT00000 029587.2	Dpysl4	ENSRNOG00 000027582	dihydropyrimidinase-like 4 Source RGD Symbol Acc 2409
D01	UPFR1099141	ENSRNOT00000 026350.7	Esr1	ENSRNOG00 000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
D02	UPFR1075141	ENSRNOT00000 025928.5	Fas	ENSRNOG00 000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
D03	UPFR1108356	ENSRNOT00000 003998.2	Faslg	ENSRNOG00 000002978	Fas ligand Source RGD Symbol Acc 3880
D04	UPFR1058401	ENSRNOT00000 009058.6	Foxi1	ENSRNOG00 000006293	forkhead box I1 Source RGD Symbol Acc 1307421
D05	UPFR1022261	ENSRNOT00000 075796.2	Gaa	ENSRNOG00 000047656	glucosidase, alpha, acid Source RGD Symbol Acc 735227
D06	UPFR1092990	ENSRNOT00000 007698.6	Gadd45a	ENSRNOG00 000005615	growth arrest and DNA-damage-inducible, alpha Source RGD Symbol Acc 2654
D07	UPFR1059007	ENSRNOT00000 006319.3	Galnt5	ENSRNOG00 000004645	polypeptide N-acetylgalactosaminyltransferase 5 Source RGD Symbol Acc 620361
D08	UPFR1087543	ENSRNOT00000 005347.5	Grb2	ENSRNOG00 000003990	growth factor receptor bound protein 2 Source RGD Symbol Acc 619758
D09	UPFR1056345	ENSRNOT00000 081875.1	Hspbp1	ENSRNOG00 000002241	HSPB1 associated protein 1 Source RGD Symbol Acc 620870
D10	UPFR1039252	ENSRNOT00000 058166.3	Htt	ENSRNOG00 000011073	huntingtin Source RGD Symbol Acc 68337
D11	UPFR1084134	ENSRNOT00000 009919.2	Iifng	ENSRNOG00 000007468	interferon gamma Source RGD Symbol Acc 2866
D12	UPFR1050099	ENSRNOT00000 038780.6	Igf1	ENSRNOG00 000004517	insulin-like growth factor 1 Source RGD Symbol Acc 2868
E01	UPFR1018620	ENSRNOT00000 019267.6	Igf1r	ENSRNOG00 000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
E02	UPFR1114751	ENSRNOT00000 027656.3	Ins2	ENSRNOG00 000020405	insulin 2 Source RGD Symbol Acc 2916
E03	UPFR1059248	ENSRNOT00000 045545.3	Irgm	ENSRNOG00 000031138	immunity-related GTPase M Source RGD Symbol Acc 1305163
E04	UPFR1102506	ENSRNOT00000 040737.2	Kcnp1	ENSRNOG00 000005365	potassium voltage-gated channel interacting protein 1 Source RGD Symbol Acc 70886
E05	UPFR1017922	ENSRNOT00000 028544.5	Mag	ENSRNOG00 000021023	myelin-associated glycoprotein Source RGD Symbol Acc 3035
E06	UPFR1091462	ENSRNOT00000 035060.4	Map1lc3a	ENSRNOG00 000025443	microtubule-associated protein 1 light chain 3 alpha Source RGD Symbol Acc 735183
E07	UPFR1048766	ENSRNOT00000 065216.3	Mapk8	ENSRNOG00 000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
E08	UPFR1067588	ENSRNOT00000 013914.4	Api5	ENSRNOG00 000009689	apoptosis inhibitor 5 Source RGD Symbol Acc 1309772
E09	UPFR1116688	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
E10	UPFR1059501	ENSRNOT00000 020908.5	Nol3	ENSRNOG00 000015588	nucleolar protein 3 Source RGD Symbol Acc 708558
E11	UPFR1059552	ENSRNOT00000 044784.1	Olr1583	ENSRNOG00 000045582	olfactory receptor 1583 Source RGD Symbol Acc 1333448
E12	UPFR1022638	ENSRNOT00000 004232.5	Parp1	ENSRNOG00 000003084	poly (ADP-ribose) polymerase 1 Source RGD Symbol Acc 2053
F01	UPFR1118434	ENSRNOT00000 011840.6	Parp2	ENSRNOG00 000008892	poly (ADP-ribose) polymerase 2 Source RGD Symbol Acc 1310568
F02	UPFR1079473	ENSRNOT00000 066816.2	Pik3c3	ENSRNOG00 000017840	phosphatidylinositol 3-kinase, catalytic subunit type 3 Source RGD Symbol Acc 620899
F03	UPFR1043890	ENSRNOT00000 028143.3	Pten	ENSRNOG00 000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
F04	UPFR1103254	ENSRNOT00000 064305.3	PVR	ENSRNOG00 000019202	poliovirus receptor Source RGD Symbol Acc 3813
F05	UPFR1101757	ENSRNOT00000 032355.5	Rab25	ENSRNOG00 000023640	RAB25, member RAS oncogene family Source RGD Symbol Acc 1308447
F06	UPFR1070720	ENSRNOT00000 027347.5	RGD13115 17	ENSRNOG00 000020199	similar to RIKEN cDNA 9430015G10 Source RGD Symbol Acc 1311517
F07	UPFR1024122	ENSRNOT00000 016260.8	Dennd4a	ENSRNOG00 000011739	DENN domain containing 4A Source RGD Symbol Acc 1562639
F08	UPFR1107808	ENSRNOT00000 005226.4	Rps6kb1	ENSRNOG00 000003919	ribosomal protein S6 kinase B1 Source RGD Symbol Acc 620683
F09	UPFR1068205	ENSRNOT00000 039247.4	Snca	ENSRNOG00 000008656	synuclein alpha Source RGD Symbol Acc 3729
F10	UPFR1083875	ENSRNOT00000 012604.4	Spata2	ENSRNOG00 000009207	spermatogenesis associated 2 Source RGD Symbol Acc 620754

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1112424	ENSRNOT00000059255.5	Sqstm1	ENSRNOG0000003147	sequestosome 1 Source RGD Symbol Acc 69287
F12	UPFR1048953	ENSRNOT00000079019.1	Sycp2	ENSRNOG00000061690	synaptonemal complex protein 2 Source RGD Symbol Acc 69429
G01	UPFR1113383	ENSRNOT00000079536.1	Maco1	ENSRNOG00000056156	macoilin 1 Source RGD Symbol Acc 1561685
G02	UPFR1098022	ENSRNOT00000079677.1	LOC103694380	ENSRNOG00000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G03	UPFR1016844	ENSRNOT00000066128.4	AABR07018323.1	ENSRNOG00000038483	
G04	UPFR1015258	ENSRNOT00000011344.5	Tnfrsf11b	ENSRNOG0000008336	TNF receptor superfamily member 11B Source RGD Symbol Acc 619802
G05	UPFR1079067	ENSRNOT00000048529.4	Tnfrsf1a	ENSRNOG00000031312	TNF receptor superfamily member 1A Source RGD Symbol Acc 621237
G06	UPFR1097673	ENSRNOT00000027251.4	Tnfrsf4	ENSRNOG00000020106	TNF receptor superfamily member 4 Source RGD Symbol Acc 3920
G07	UPFR1119781	ENSRNOT00000022968.4	Tnfrsf8	ENSRNOG00000016782	TNF receptor superfamily member 8 Source RGD Symbol Acc 3879
G08	UPFR1095007	ENSRNOT00000085115.1	Tp53	ENSRNOG00000010756	tumor protein p53 Source RGD Symbol Acc 3889
G09	UPFR1056890	ENSRNOT00000008253.6	Traf2	ENSRNOG0000006238	Tnf receptor-associated factor 2 Source RGD Symbol Acc 1310457
G10	UPFR1107823	ENSRNOT00000034676.4	Txn14b	ENSRNOG00000021379	thioredoxin-like 4B Source RGD Symbol Acc 1305127
G11	UPFR1015373	ENSRNOT00000056790.3	Ulk1	ENSRNOG00000037505	unc-51 like autophagy activating kinase 1 Source RGD Symbol Acc 1589743
G12	UPFR1049285	ENSRNOT00000009336.3	Xiap	ENSRNOG0000006967	X-linked inhibitor of apoptosis Source RGD Symbol Acc 620692
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 $\mu$ l reactions: 20 $\mu$ l 8x gDNA Removal Mix, 10 $\mu$ l Reverse Transcription Enzyme, 40 $\mu$ l Reverse Transcription Mix (containing RT primers), 20 $\mu$ l Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 $\mu$ l QuantiNova Probe RT Mix, 20 $\mu$ l Internal Control RNA, 500 $\mu$ l Yellow Template Dilution Buffer, 250 $\mu$ l ROX Reference Dye, 1.9 $\mu$ l RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ l 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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