

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

## Rat Phagocytosis

Cat. no. 249955 UPRN-173ZR

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 (Rotor-Gene): QuantiNova LNA Probe 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 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
A	Adipoq	Ager	Anxa1	Axl	C3	Calr	Cd14	RGD1565355	Cd44	Cd47	Ceacam3	Clec7a
B	Clic4	Cnn1	Cnn3	Colec12	Crk	Crp	Csf1	Csf2	Csk	Cyp2s1	Dock1	AABR0702927 2.1
C	Elmo1	Fas	Fcer1g	Fcgr1a	Fcgr2a	Fcgr2b	Fyn	Gulp1	Ifng	Il1rl1	Itgad	Itgav
D	Itgb2	Lyn	Mapk14	Marco	AABR0700669 1.1	Mcoln3	Mertk	Mfge8	LOC1036948 77	Msn	Myd88	Nod1
E	Nod2	Tlr2	Pik3cb	Pip5k1a	Pla2g4a	Pla2g5	Pld1	Pld2	Prkce	Pros1	Pten	Rab5b
F	Rab7a	Rac1	Rac2	Rala	Ralb	Rapgef3	Rhoa	Scarb1	Serpine1	Sifpd	Siglec1	Sirpa
G	Slab2	Stx18	Syk	Tgm2	Tlr3	Tlr9	LOC1036943 80	LOC1036899 74	Vamp7	Vav1	Was	Wnt5a
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	UPFR1094195	ENSRNOT00000 08988.1	Adipoq	ENSRNOG00 000001821	adiponectin, C1Q and collagen domain containing Source RGD Symbol Acc 628748
A02	UPFR1060992	ENSRNOT00000 072848.2	Ager	ENSRNOG00 000000439	advanced glycosylation end product-specific receptor Source RGD Symbol Acc 69258
A03	UPFR1021804	ENSRNOT00000 023664.6	Anxa1	ENSRNOG00 000017469	annexin A1 Source RGD Symbol Acc 2118
A04	UPFR1095705	ENSRNOT00000 028132.2	Axl	ENSRNOG00 000020716	Axl receptor tyrosine kinase Source RGD Symbol Acc 620028
A05	UPFR1069924	ENSRNOT00000 075494.1	C3	ENSRNOG00 000046834	complement C3 Source RGD Symbol Acc 2232
A06	UPFR1077775	ENSRNOT00000 004091.6	Calr	ENSRNOG00 000003029	calreticulin Source RGD Symbol Acc 620288
A07	UPFR1097993	ENSRNOT00000 023977.6	Cd14	ENSRNOG00 000017819	CD14 molecule Source RGD Symbol Acc 620588
A08	UPFR1013797	ENSRNOT00000 008319.8	RGD15653 55	ENSRNOG00 000040108	similar to fatty acid translocase/CD36 Source RGD Symbol Acc 1565355
A09	UPFR1040363	ENSRNOT00000 009073.7	Cd44	ENSRNOG00 000006094	CD44 molecule (Indian blood group) Source RGD Symbol Acc 2307
A10	UPFR1086337	ENSRNOT00000 050142.5	Cd47	ENSRNOG00 000001964	Cd47 molecule Source RGD Symbol Acc 2308
A11	UPFR1084314	ENSRNOT00000 023663.2	Ceacam3	ENSRNOG00 000027607	carcinoembryonic antigen-related cell adhesion molecule 3 Source RGD Symbol Acc 2333
A12	UPFR1113073	ENSRNOT00000 091552.1	Clec7a	ENSRNOG00 000054251	C-type lectin domain containing 7A Source RGD Symbol Acc 1565140
B01	UPFR1122214	ENSRNOT00000 024464.4	Clic4	ENSRNOG00 000018109	chloride intracellular channel 4 Source RGD Symbol Acc 61857
B02	UPFR1066899	ENSRNOT00000 029577.6	Cnn1	ENSRNOG00 000027736	calponin 1 Source RGD Symbol Acc 621883
B03	UPFR1063708	ENSRNOT00000 015579.6	Cnn3	ENSRNOG00 000011559	calponin 3 Source RGD Symbol Acc 71044
B04	UPFR1050188	ENSRNOT00000 065494.1	Colec12	ENSRNOG00 000016366	collectin sub-family member 12 Source RGD Symbol Acc 735039
B05	UPFR1113088	ENSRNOT00000 006407.4	Crk	ENSRNOG00 000025792	CRK proto-oncogene, adaptor protein Source RGD Symbol Acc 2405
B06	UPFR1072132	ENSRNOT00000 000058.6	Crp	ENSRNOG00 000000053	C-reactive protein Source RGD Symbol Acc 2411
B07	UPFR1022984	ENSRNOT00000 081835.1	Csf1	ENSRNOG00 000018659	colony stimulating factor 1 Source RGD Symbol Acc 621063
B08	UPFR1084630	ENSRNOT00000 032333.3	Csf2	ENSRNOG00 000026805	colony stimulating factor 2 Source RGD Symbol Acc 621065
B09	UPFR1108732	ENSRNOT00000 026358.6	Csk	ENSRNOG00 000019374	C-terminal Src kinase Source RGD Symbol Acc 1308800
B10	UPFR1056021	ENSRNOT00000 028177.4	Cyp2s1	ENSRNOG00 000020743	cytochrome P450, family 2, subfamily s, polypeptide 1 Source RGD Symbol Acc 1306078
B11	UPFR1072734	ENSRNOT00000 054897.2	Dock1	ENSRNOG00 000018683	dedicator of cyto-kinesis 1 Source RGD Symbol Acc 1566072
B12	UPFR1034946	ENSRNOT00000 059810.4	AABR0702 9272.1	ENSRNOG00 000006932	
C01	UPFR1019766	ENSRNOT00000 078331.1	Elmo1	ENSRNOG00 000059705	engulfment and cell motility 1 Source RGD Symbol Acc 1308182
C02	UPFR1075141	ENSRNOT00000 025928.5	Fas	ENSRNOG00 000019142	Fas cell surface death receptor Source RGD Symbol Acc 619831
C03	UPFR1085926	ENSRNOT00000 029179.3	Fcer1g	ENSRNOG00 000024159	Fc fragment of IgE receptor Ig Source RGD Symbol Acc 2599
C04	UPFR1045164	ENSRNOT00000 082450.1	Fcgr1a	ENSRNOG00 000021199	Fc fragment of IgG receptor Ia Source RGD Symbol Acc 1309912
C05	UPFR1036757	ENSRNOT00000 091821.1	Fcgr2a	ENSRNOG00 000046663	low affinity immunoglobulin gamma Fc region receptor III-like Source RGD Symbol Acc 6490558
C06	UPFR1121617	ENSRNOT00000 058497.3	Fcgr2b	ENSRNOG00 000046452	Fc fragment of IgG receptor IIb Source RGD Symbol Acc 631331
C07	UPFR1087186	ENSRNOT00000 085987.1	Fyn	ENSRNOG00 000000596	FYN proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 2641
C08	UPFR1012920	ENSRNOT00000 085908.1	Gulp1	ENSRNOG00 000003242	GULP PTB domain containing engulfment adaptor 1 Source RGD Symbol Acc 1306380
C09	UPFR1084134	ENSRNOT00000 009919.2	Ifng	ENSRNOG00 000007468	interferon gamma Source RGD Symbol Acc 2866
C10	UPFR1121330	ENSRNOT00000 020108.5	Il1rl1	ENSRNOG00 000014835	interleukin 1 receptor-like 1 Source RGD Symbol Acc 2894
		ENSRNOT00000		ENSRNOG00	

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
C11	UPFR1089159	026748.4	Itgad	000019728	integrin subunit alpha M Source RGD Symbol Acc 2926
C12	UPFR1097241	ENSRNOT00000 006961.7	Itgav	ENSRNOG00 000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
D01	UPFR1033837	ENSRNOT00000 001639.6	Itgb2	ENSRNOG00 000001224	integrin subunit beta 2 Source RGD Symbol Acc 1305581
D02	UPFR1017192	ENSRNOT00000 011130.5	Lyn	ENSRNOG00 000008180	LYN proto-oncogene, Src family tyrosine kinase Source RGD Symbol Acc 621017
D03	UPFR1036984	ENSRNOT00000 000617.8	Makp14	ENSRNOG00 000000513	mitogen activated protein kinase 14 Source RGD Symbol Acc 70496
D04	UPFR1108915	ENSRNOT00000 075773.2	Marco	ENSRNOG00 000049303	macrophage receptor with collagenous structure Source RGD Symbol Acc 1589662
D05	UPFR1080471	ENSRNOT00000 050984.5	AABR0700	ENSRNOG00 6691.1	
D06	UPFR1063385	ENSRNOT00000 020230.6	Mcoln3	ENSRNOG00 000015024	mucolipin 3 Source RGD Symbol Acc 1308420
D07	UPFR1079096	ENSRNOT00000 023419.4	Mertk	ENSRNOG00 000017319	MER proto-oncogene, tyrosine kinase Source RGD Symbol Acc 69283
D08	UPFR1047785	ENSRNOT00000 079100.1	Mfge8	ENSRNOG00 000017510	milk fat globule-EGF factor 8 protein Source RGD Symbol Acc 3083
D09	UPFR1126542	ENSRNOT00000 008608.4	LOC10369 4877	ENSRNOG00 000006589	macrophage migration inhibitory factor Source RGD Symbol Acc 621163
D10	UPFR1111582	ENSRNOT00000 093499.1	Msn	ENSRNOG00 000030118	moesin Source RGD Symbol Acc 621260
D11	UPFR1120879	ENSRNOT00000 018341.5	Myd88	ENSRNOG00 000013634	MYD88, innate immune signal transduction adaptor Source RGD Symbol Acc 735043
D12	UPFR1118740	ENSRNOT00000 088085.1	Nod1	ENSRNOG00 000010629	nucleotide-binding oligomerization domain containing 1 Source RGD Symbol Acc 1562269
E01	UPFR1045696	ENSRNOT00000 065103.2	Nod2	ENSRNOG00 000014124	nucleotide-binding oligomerization domain containing 2 Source RGD Symbol Acc 1306368
E02	UPFR1061984	ENSRNOT00000 013025.4	Tlr2	ENSRNOG00 000009822	toll-like receptor 2 Source RGD Symbol Acc 735138
E03	UPFR1105369	ENSRNOT00000 022179.4	Pik3cb	ENSRNOG00 000016384	phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit beta Source RGD Symbol Acc 620917
E04	UPFR1032484	ENSRNOT00000 028609.4	Pip5k1a	ENSRNOG00 000021068	phosphatidylinositol-4-phosphate 5-kinase, type 1, alpha Source RGD Symbol Acc 1306127
E05	UPFR1116754	ENSRNOT00000 090693.1	Pla2g4a	ENSRNOG00 000002657	phospholipase A2 group IVA Source RGD Symbol Acc 67366
E06	UPFR1033443	ENSRNOT00000 022716.5	Pla2g5	ENSRNOG00 000016838	phospholipase A2, group V Source RGD Symbol Acc 62051
E07	UPFR1104627	ENSRNOT00000 039308.4	Pld1	ENSRNOG00 000028156	phospholipase D1 Source RGD Symbol Acc 3349
E08	UPFR1114011	ENSRNOT00000 056998.4	Pld2	ENSRNOG00 000019604	phospholipase D2 Source RGD Symbol Acc 3350
E09	UPFR1107353	ENSRNOT00000 020959.7	Prkce	ENSRNOG00 000015603	protein kinase C, epsilon Source RGD Symbol Acc 61925
E10	UPFR1043306	ENSRNOT00000 073689.1	Pros1	ENSRNOG00 000048723	protein S Source RGD Symbol Acc 620971
E11	UPFR1043890	ENSRNOT00000 028143.3	Pten	ENSRNOG00 000020723	phosphatase and tensin homolog Source RGD Symbol Acc 61995
E12	UPFR1015758	ENSRNOT00000 061878.4	Rab5b	ENSRNOG00 000006130	RAB5B, member RAS oncogene family Source RGD Symbol Acc 1306489
F01	UPFR1082455	ENSRNOT00000 016432.6	Rab7a	ENSRNOG00 000012247	RAB7A, member RAS oncogene family Source RGD Symbol Acc 61908
F02	UPFR1019271	ENSRNOT00000 001417.5	Rac1	ENSRNOG00 000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
F03	UPFR1037602	ENSRNOT00000 009994.5	Rac2	ENSRNOG00 000007350	Rac family small GTPase 2 Source RGD Symbol Acc 1307568
F04	UPFR1082097	ENSRNOT00000 018190.4	Rala	ENSRNOG00 000013454	RAS like proto-oncogene A Source RGD Symbol Acc 619851
F05	UPFR1078497	ENSRNOT00000 003413.6	Ralb	ENSRNOG00 000002440	RAS like proto-oncogene B Source RGD Symbol Acc 619852
F06	UPFR1109518	ENSRNOT00000 083182.1	Rapgef3	ENSRNOG00 000059961	Rap guanine nucleotide exchange factor 3 Source RGD Symbol Acc 621869
F07	UPFR1119707	ENSRNOT00000 071664.2	Rhoa	ENSRNOG00 000050519	ras homolog family member A Source RGD Symbol Acc 619921
F08	UPFR1089083	ENSRNOT00000 001299.7	Scarb1	ENSRNOG00 000000981	scavenger receptor class B, member 1 Source RGD Symbol Acc 2302
F09	UPFR1051798	ENSRNOT00000 001916.2	Serpine1	ENSRNOG00 000001414	serpin family E member 1 Source RGD Symbol Acc 3249
F10	UPFR1113769	ENSRNOT00000 084813.1	Sftpd	ENSRNOG00 000056001	surfactant protein D Source RGD Symbol Acc 3667

<b>Position</b>	<b>Assay</b>	<b>Name</b>	<b>Symbol</b>	<b>Ensembl ID</b>	<b>Description</b>
F11	UPFR1107049	ENSRNOT00000 028855.7	Siglec1	ENSRNOG00 000021243	sialic acid binding Ig like lectin 1 Source RGD Symbol Acc 1311953
F12	UPFR1095083	ENSRNOT00000 006408.6	Sirpa	ENSRNOG00 000004763	signal-regulatory protein alpha Source RGD Symbol Acc 3449
G01	UPFR1058489	ENSRNOT00000 059538.3	Stab2	ENSRNOG00 000038948	stabilin 2 Source RGD Symbol Acc 628822
G02	UPFR1054650	ENSRNOT00000 008410.5	Stx18	ENSRNOG00 000006139	syntaxin 18 Source RGD Symbol Acc 1310058
G03	UPFR1034559	ENSRNOT00000 016942.6	Syk	ENSRNOG00 000012160	spleen associated tyrosine kinase Source RGD Symbol Acc 3796
G04	UPFR1068061	ENSRNOT00000 018328.5	Tgm2	ENSRNOG00 000012956	transglutaminase 2 Source RGD Symbol Acc 621081
G05	UPFR1036867	ENSRNOT00000 087986.1	Tlr3	ENSRNOG00 000021726	toll-like receptor 3 Source RGD Symbol Acc 735171
G06	UPFR1099903	ENSRNOT00000 074194.1	Tlr9	ENSRNOG00 000048161	toll-like receptor 9 Source RGD Symbol Acc 631352
G07	UPFR1098022	ENSRNOT00000 079677.1	LOC10369 4380	ENSRNOG00 000055156	tumor necrosis factor-like Source RGD Symbol Acc 9404643
G08	UPFR1105006	ENSRNOT00000 049056.4	LOC10368 9974	ENSRNOG00 000049547	TNF superfamily member 11 Source RGD Symbol Acc 620784
G09	UPFR1102216	ENSRNOT00000 011065.4	Vamp7	ENSRNOG00 000008372	vesicle-associated membrane protein 7 Source RGD Symbol Acc 621558
G10	UPFR1074622	ENSRNOT00000 073294.2	Vav1	ENSRNOG00 000050430	vav guanine nucleotide exchange factor 1 Source RGD Symbol Acc 3951
G11	UPFR1114413	ENSRNOT00000 051439.4	Was	ENSRNOG00 000031058	Wiskott-Aldrich syndrome Source RGD Symbol Acc 1563567
G12	UPFR1100946	ENSRNOT00000 021164.3	Wnt5a	ENSRNOG00 000015618	Wnt family member 5A Source RGD Symbol Acc 69250
H01	UPFR1132952	ENSRNOT00000 080216.1	Actb	ENSRNOG00 000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000 023017.5	B2m	ENSRNOG00 000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000 065935.3	Hprt1	ENSRNOG00 000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000 017468.2	Ldha	ENSRNOG00 000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000 018820.5	Rplp1	ENSRNOG00 000013874	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.

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