

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

## Rat WNT Signaling Pathway

Cat. no. 249955 UPRN-043ZR

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	Apc	Dkk2	Axin2	Bcl9	Btrc	Vangl2	Cby1	Ccnd1	Ccnd2	Cank1a1	Csnk2a1	Ctmb1
B	Daam1	Dab2	Dixdc1	Dkk1	Dkk3	Dkk4	Dvl1	Dvl2	AABR0705853 9.1	Fbxw11	Fgf4	Fosl1
C	Frzb	Fzd1	Fzd2	Fzd3	Fzd4	Fzd5	Fzd6	Fzd7	Fzd9	Gsk3a	Gsk3b	Jun
D	Kremen1	Kremen2	Lef1	Lrp5	Lrp6	Mapk8	Mif	Mmp7	Myc	Nkd1	Nkd2	Pitx2
E	Porcn	Ppard	Prickle1	Pygo2	Rac1	Nlk	Rhoa	Sfrp1	Sfrp2	Sfrp4	Sfrp5	Tcf7l1
F	Tcf4	Tcf7	Tcf3	Tle1	Wif1	Ccn4	Wnt1	Wnt10a	Wnt10b	Wnt11	Wnt2	Wnt2b
G	Wnt3	Wnt3a	Wnt4	Wnt5a	Wnt5b	Wnt6	Wnt7a	Wnt7b	Wnt8a	Wnt8b	Wnt9a	Wnt9b
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	UPFR1090312	ENSRNOT00000090264.1	Apc	ENSRNOG0000020423	APC, WNT signaling pathway regulator Source RGD Symbol Acc 2123
A02	UPFR1018590	ENSRNOT00000015116.6	Dkk2	ENSRNOG0000011360	dickkopf WNT signaling pathway inhibitor 2 Source RGD Symbol Acc 1308639
A03	UPFR1102592	ENSRNOT00000088599.1	Axin2	ENSRNOG0000055010	axin 2 Source RGD Symbol Acc 69259
A04	UPFR1082630	ENSRNOT00000023548.6	Bcl9	ENSRNOG0000017516	BCL9, transcription coactivator Source RGD Symbol Acc 1306934
A05	UPFR1066655	ENSRNOT00000022426.7	Btrc	ENSRNOG0000016280	beta-transducin repeat containing E3 ubiquitin protein ligase Source RGD Symbol Acc 1359721
A06	UPFR1101298	ENSRNOT00000091710.1	Vangl2	ENSRNOG000004889	VANGL planar cell polarity protein 2 Source RGD Symbol Acc 1309442
A07	UPFR1067688	ENSRNOT00000018787.4	Cby1	ENSRNOG0000013892	chibby family member 1, beta catenin antagonist Source RGD Symbol Acc 708481
A08	UPFR1042457	ENSRNOT00000088588.1	Ccnd1	ENSRNOG0000020918	cyclin D1 Source RGD Symbol Acc 68384
A09	UPFR1088052	ENSRNOT00000086440.1	Ccnd2	ENSRNOG0000057710	cyclin D2 Source RGD Symbol Acc 621083
A10	UPFR1032693	ENSRNOT00000066133.3	Csnk1a1	ENSRNOG0000017106	casein kinase 1, alpha 1 Source RGD Symbol Acc 71098
A11	UPFR1071105	ENSRNOT00000007558.5	Csnk2a1	ENSRNOG0000005276	casein kinase 2 alpha 1 Source RGD Symbol Acc 621663
A12	UPFR1057605	ENSRNOT00000079085.1	Cttnb1	ENSRNOG0000054172	catenin beta 1 Source RGD Symbol Acc 70487
B01	UPFR1112522	ENSRNOT00000005846.4	Daam1	ENSRNOG000004345	dishevelled associated activator of morphogenesis 1 Source RGD Symbol Acc 1305119
B02	UPFR1110844	ENSRNOT00000050655.5	Dab2	ENSRNOG0000028930	DAB2, clathrin adaptor protein Source RGD Symbol Acc 621007
B03	UPFR1085091	ENSRNOT00000039045.5	Dixdc1	ENSRNOG0000010260	DIX domain containing 1 Source RGD Symbol Acc 1309902
B04	UPFR1075162	ENSRNOT00000015771.7	Dkk1	ENSRNOG0000011692	dickkopf WNT signaling pathway inhibitor 1 Source RGD Symbol Acc 1307313
B05	UPFR1110329	ENSRNOT00000022301.6	Dkk3	ENSRNOG0000016343	dickkopf WNT signaling pathway inhibitor 3 Source RGD Symbol Acc 621846
B06	UPFR1065068	ENSRNOT00000026067.3	Dkk4	ENSRNOG0000019267	dickkopf WNT signaling pathway inhibitor 4 Source RGD Symbol Acc 1563172
B07	UPFR1108891	ENSRNOT00000026439.5	Dvl1	ENSRNOG0000019423	dishevelled segment polarity protein 1 Source RGD Symbol Acc 620632
B08	UPFR1087540	ENSRNOT00000024348.6	Dvl2	ENSRNOG0000017915	dishevelled segment polarity protein 2 Source RGD Symbol Acc 1309725
B09	UPFR1102114	ENSRNOT00000000206.7	AABR07058539.1	ENSRNOG0000000190	
B10	UPFR1042626	ENSRNOT00000079698.1	Fbxw11	ENSRNOG000004395	F-box and WD repeat domain containing 11 Source RGD Symbol Acc 1309121
B11	UPFR1084715	ENSRNOT00000028355.5	Fgf4	ENSRNOG0000020890	fibroblast growth factor 4 Source RGD Symbol Acc 620127
B12	UPFR1040543	ENSRNOT00000027891.2	Fos1	ENSRNOG0000020552	FOS like 1, AP-1 transcription factor subunit Source RGD Symbol Acc 2627
C01	UPFR1104445	ENSRNOT00000010247.5	Frzb	ENSRNOG0000007765	frizzled-related protein Source RGD Symbol Acc 1311315
C02	UPFR1020612	ENSRNOT00000021979.4	Fzd1	ENSRNOG0000016242	frizzled class receptor 1 Source RGD Symbol Acc 61916
C03	UPFR1013999	ENSRNOT00000032944.2	Fzd2	ENSRNOG0000021962	frizzled class receptor 2 Source RGD Symbol Acc 71012
C04	UPFR1101930	ENSRNOT00000071464.1	Fzd3	ENSRNOG0000047211	frizzled class receptor 3 Source RGD Symbol Acc 628814
C05	UPFR1029590	ENSRNOT00000023205.6	Fzd4	ENSRNOG0000016848	frizzled class receptor 4 Source RGD Symbol Acc 71017
C06	UPFR1079665	ENSRNOT00000019698.4	Fzd5	ENSRNOG0000014678	frizzled class receptor 5 Source RGD Symbol Acc 631406
C07	UPFR1067671	ENSRNOT00000006195.5	Fzd6	ENSRNOG0000004660	frizzled class receptor 6 Source RGD Symbol Acc 628816
C08	UPFR1085249	ENSRNOT00000021569.6	Fzd7	ENSRNOG0000016119	frizzled class receptor 7 Source RGD Symbol Acc 2321905
C09	UPFR1109683	ENSRNOT00000001973.3	Fzd9	ENSRNOG0000001452	frizzled class receptor 9 Source RGD Symbol Acc 628817
C10	UPFR1081475	ENSRNOT00000027677.5	Gsk3a	ENSRNOG0000020417	glycogen synthase kinase 3 alpha Source RGD Symbol Acc 620351
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1109626	077612.1	Gsk3b	000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
C12	UPFR1037970	ENSRNOT00000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
D01	UPFR1106670	ENSRNOT00000083770.1	Kremen1	ENSRNOG0000051487	kringle containing transmembrane protein 1 Source RGD Symbol Acc 620789
D02	UPFR1087438	ENSRNOT00000005718.3	Kremen2	ENSRNOG0000004122	kringle containing transmembrane protein 2 Source RGD Symbol Acc 1310795
D03	UPFR1076567	ENSRNOT00000013694.3	Lef1	ENSRNOG0000010121	lymphoid enhancer binding factor 1 Source RGD Symbol Acc 620241
D04	UPFR1116126	ENSRNOT00000022213.7	Lrp5	ENSRNOG0000015911	LDL receptor related protein 5 Source RGD Symbol Acc 1309329
D05	UPFR1077588	ENSRNOT00000082102.1	Lrp6	ENSRNOG0000006338	LDL receptor related protein 6 Source RGD Symbol Acc 1304749
D06	UPFR1048766	ENSRNOT00000065216.3	Mapk8	ENSRNOG0000020155	mitogen-activated protein kinase 8 Source RGD Symbol Acc 621506
D07	UPFR1057784	ENSRNOT00000083127.1	Mitf	ENSRNOG0000008658	melanocyte inducing transcription factor Source RGD Symbol Acc 3092
D08	UPFR1034539	ENSRNOT00000014041.5	Mmp7	ENSRNOG0000010507	matrix metalloproteinase 7 Source RGD Symbol Acc 3100
D09	UPFR1101439	ENSRNOT00000006188.5	Myc	ENSRNOG0000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
D10	UPFR1072986	ENSRNOT00000019301.7	Nkd1	ENSRNOG0000014293	NKD1, WNT signaling pathway inhibitor Source RGD Symbol Acc 1308491
D11	UPFR1031471	ENSRNOT00000021898.5	Nkd2	ENSRNOG0000016103	NKD2, WNT signaling pathway inhibitor Source RGD Symbol Acc 1311459
D12	UPFR1089140	ENSRNOT00000051009.4	Pitx2	ENSRNOG0000010681	paired-like homeodomain 2 Source RGD Symbol Acc 3331
E01	UPFR1035417	ENSRNOT00000078392.1	Porcn	ENSRNOG0000004819	porcupine O-acyltransferase Source RGD Symbol Acc 1564947
E02	UPFR1082868	ENSRNOT00000042539.5	Ppard	ENSRNOG0000000503	peroxisome proliferator-activated receptor delta Source RGD Symbol Acc 3370
E03	UPFR1092220	ENSRNOT00000036750.4	Prickle1	ENSRNOG0000022772	prickle planar cell polarity protein 1 Source RGD Symbol Acc 735090
E04	UPFR1126566	ENSRNOT00000028052.4	Pygo2	ENSRNOG0000020663	pygopus family PHD finger 2 Source RGD Symbol Acc 1308535
E05	UPFR1019271	ENSRNOT00000001417.5	Rac1	ENSRNOG000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
E06	UPFR1017222	ENSRNOT00000011726.6	Nlk	ENSRNOG0000008704	nemo like kinase Source RGD Symbol Acc 1561602
E07	UPFR1119707	ENSRNOT00000071664.2	Rhoa	ENSRNOG0000050519	ras homolog family member A Source RGD Symbol Acc 619921
E08	UPFR1075309	ENSRNOT00000024128.6	Sfrp1	ENSRNOG0000017783	secreted frizzled-related protein 1 Source RGD Symbol Acc 621074
E09	UPFR1086653	ENSRNOT00000012658.6	Sfrp2	ENSRNOG0000009465	secreted frizzled-related protein 2 Source RGD Symbol Acc 735163
E10	UPFR1093667	ENSRNOT00000079368.1	Sfrp4	ENSRNOG0000054957	secreted frizzled-related protein 4 Source RGD Symbol Acc 621075
E11	UPFR1118153	ENSRNOT00000020182.5	Sfrp5	ENSRNOG0000014940	secreted frizzled-related protein 5 Source RGD Symbol Acc 1310369
E12	UPFR1026727	ENSRNOT00000020005.7	Tcf711	ENSRNOG0000014753	transcription factor 7 like 1 Source RGD Symbol Acc 1311671
F01	UPFR1028213	ENSRNOT00000081797.1	Tcf4	ENSRNOG0000012405	transcription factor 4 Source RGD Symbol Acc 69271
F02	UPFR1041848	ENSRNOT00000008022.7	Tcf7	ENSRNOG0000005872	transcription factor 7 Source RGD Symbol Acc 1305894
F03	UPFR1080929	ENSRNOT00000085899.1	Tcf3	ENSRNOG0000051499	transcription factor 3 Source RGD Symbol Acc 620914
F04	UPFR1113015	ENSRNOT00000058906.3	Tle1	ENSRNOG0000005882	TLE family member 1, transcriptional corepressor Source RGD Symbol Acc 1309237
F05	UPFR1017889	ENSRNOT00000006426.5	Wif1	ENSRNOG0000004476	Wnt inhibitory factor 1 Source RGD Symbol Acc 619774
F06	UPFR1109359	ENSRNOT00000009673.7	Ccn4	ENSRNOG0000007078	cellular communication network factor 4 Source RGD Symbol Acc 69431
F07	UPFR1120741	ENSRNOT00000090156.1	Wnt1	ENSRNOG0000061818	Wnt family member 1 Source RGD Symbol Acc 1597195
F08	UPFR1080362	ENSRNOT00000086375.1	Wnt10a	ENSRNOG0000052510	Wnt family member 10A Source RGD Symbol Acc 1307015
F09	UPFR1014479	ENSRNOT00000081468.1	Wnt10b	ENSRNOG0000061238	Wnt family member 10B Source RGD Symbol Acc 1304988
F10	UPFR1057474	ENSRNOT00000021674.5	Wnt11	ENSRNOG0000015982	Wnt family member 11 Source RGD Symbol Acc 621463

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1075306	ENSRNOT00000083039.1	Wnt2	ENSRNOG00000051905	Wnt family member 2 Source RGD Symbol Acc 621346
F12	UPFR1054052	ENSRNOT00000019349.4	Wnt2b	ENSRNOG00000014385	Wnt family member 2B Source RGD Symbol Acc 69346
G01	UPFR1102007	ENSRNOT00000005176.5	Wnt3	ENSRNOG00000003845	Wnt family member 3 Source RGD Symbol Acc 3972
G02	UPFR1043063	ENSRNOT00000064505.3	Wnt3a	ENSRNOG00000003039	Wnt family member 3A Source RGD Symbol Acc 1308057
G03	UPFR1100692	ENSRNOT00000018064.5	Wnt4	ENSRNOG00000013166	Wnt family member 4 Source RGD Symbol Acc 621348
G04	UPFR1100946	ENSRNOT00000021164.3	Wnt5a	ENSRNOG00000015618	Wnt family member 5A Source RGD Symbol Acc 69250
G05	UPFR1070692	ENSRNOT00000011044.4	Wnt5b	ENSRNOG00000008168	Wnt family member 5B Source RGD Symbol Acc 628850
G06	UPFR1019852	ENSRNOT00000023439.6	Wnt6	ENSRNOG00000017409	Wnt family member 6 Source RGD Symbol Acc 1304559
G07	UPFR1121667	ENSRNOT00000070832.1	Wnt7a	ENSRNOG00000048782	Wnt family member 7A Source RGD Symbol Acc 69079
G08	UPFR1108584	ENSRNOT00000021196.7	Wnt7b	ENSRNOG00000015750	Wnt family member 7B Source RGD Symbol Acc 1311441
G09	UPFR1110650	ENSRNOT00000064574.1	Wnt8a	ENSRNOG00000020157	Wnt family member 8A Source RGD Symbol Acc 1306312
G10	UPFR1099233	ENSRNOT00000018815.6	Wnt8b	ENSRNOG00000013817	Wnt family member 8B Source RGD Symbol Acc 1307644
G11	UPFR1073122	ENSRNOT00000058327.3	Wnt9a	ENSRNOG00000003066	Wnt family member 9A Source RGD Symbol Acc 1305018
G12	UPFR1040062	ENSRNOT00000078561.1	Wnt9b	ENSRNOG00000003807	Wnt family member 9B Source RGD Symbol Acc 1309574
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.

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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, LNA®, QuantiNova®, Sample to Insight® (QIAGEN Group); SYBR® (Life Technologies Corp.). Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.

09/2019 © 2019 QIAGEN, all rights reserved.