

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

## Human WNT Signaling Pathway

Cat. no. 249955 UPHS-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	AES	APC	AXIN1	AXIN2	BCL9	BTRC	CCND1	CCND2	CSNK1A1	CSNK2A1	CTBP1	CTNNB1
B	CTNNBIP1	CXIC4	DAAM1	DAB2	DIXDC1	DKK1	DKK3	DVL1	DVL2	EP300	FBXW11	FBXW4
C	FGF4	FOSL1	FOXP1	FRAT1	FRZB	FZD1	FZD2	FZD3	FZD4	FZD5	FZD6	FZD7
D	FZD8	FZD9	GSK3A	GSK3B	JUN	KREMEN1	LEF1	LRP5	LRP6	MAPK8	MMP7	MYC
E	NFATC1	NKD1	NLK	PITX2	PORCN	PPARD	PRICKLE1	PYGO1	RHOA	RHOU	RUVBL1	SFRP1
F	SFRP4	SOX17	TCF7	TCF7L1	TLE1	VANGL2	WIF1	CCN4	WNT1	WNT10A	WNT11	WNT16
G	WNT2	WNT2B	WNT3	WNT3A	WNT4	WNT5A	WNT5B	WNT6	WNT7A	WNT7B	WNT8A	WNT9A
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFH0305322	ENST00000327 141.8	AES	ENSG000000 104964	amino-terminal enhancer of split Source HGNC Symbol Acc HGNC 307
A02	UPFH1132236	ENST00000257 430.9	APC	ENSG000000 134982	APC, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 583
A03	UPFH1132262	ENST00000262 320.8	AXIN1	ENSG000000 103126	axin 1 Source HGNC Symbol Acc HGNC 903
A04	UPFH1132263	ENST00000375 702.5	AXIN2	ENSG000000 168646	axin 2 Source HGNC Symbol Acc HGNC 904
A05	UPFH1132272	ENST00000234 739.8	BCL9	ENSG000000 116128	BCL9, transcription coactivator Source HGNC Symbol Acc HGNC 1008
A06	UPFH0358747	ENST00000370 187.8	BTRC	ENSG000000 166167	beta-transducin repeat containing E3 ubiquitin protein ligase Source HGNC Symbol Acc HGNC 1144
A07	UPFH0430337	ENST00000227 507.2	CCND1	ENSG000000 110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
A08	UPFH1132296	ENST00000261 254.8	CCND2	ENSG000000 118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
A09	UPFH0546143	ENST00000377 843.6	CSNK1A1	ENSG000000 113712	casein kinase 1 alpha 1 Source HGNC Symbol Acc HGNC 2451
A10	UPFH0055149	ENST00000645 249.1	CSNK2A1	ENSG000000 101266	casein kinase 2 alpha 1 Source HGNC Symbol Acc HGNC 2457
A11	UPFH1132339	ENST00000382 952.7	CTBP1	ENSG000000 159692	C-terminal binding protein 1 Source HGNC Symbol Acc HGNC 2494
A12	UPFH0097734	ENST00000396 183.7	CTNNB1	ENSG000000 168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
B01	UPFH1132341	ENST00000377 258.5	CTNNBIP1	ENSG000000 178585	catenin beta interacting protein 1 Source HGNC Symbol Acc HGNC 16913
B02	UPFH0576231	ENST00000394 767.3	CXXC4	ENSG000000 168772	CXXC finger protein 4 Source HGNC Symbol Acc HGNC 24593
B03	UPFH1132352	ENST00000360 909.7	DAAM1	ENSG000000 100592	dishevelled associated activator of morphogenesis 1 Source HGNC Symbol Acc HGNC 18142
B04	UPFH1132353	ENST00000509 337.5	DAB2	ENSG000000 153071	DAB2, clathrin adaptor protein Source HGNC Symbol Acc HGNC 2662
B05	UPFH1132361	ENST00000440 460.6	DIXDC1	ENSG000000 150764	DIX domain containing 1 Source HGNC Symbol Acc HGNC 23695
B06	UPFH1132868	ENST00000373 970.4	DKK1	ENSG000000 107984	dickkopf WNT signaling pathway inhibitor 1 Source HGNC Symbol Acc HGNC 2891
B07	UPFH1132869	ENST00000525 493.5	DKK3	ENSG000000 050165	dickkopf WNT signaling pathway inhibitor 3 Source HGNC Symbol Acc HGNC 2893
B08	UPFH0264310	ENST00000378 891.9	DVL1	ENSG000000 107404	dishevelled segment polarity protein 1 Source HGNC Symbol Acc HGNC 3084
B09	UPFH1132373	ENST00000575 458.5	DVL2	ENSG000000 004975	dishevelled segment polarity protein 2 Source HGNC Symbol Acc HGNC 3086
B10	UPFH0118049	ENST00000635 691.1	EP300	ENSG000000 100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
B11	UPFH0321621	ENST00000265 094.9	FBXW11	ENSG000000 072803	F-box and WD repeat domain containing 11 Source HGNC Symbol Acc HGNC 13607
B12	UPFH1132398	ENST00000331 272.8	FBXW4	ENSG000000 107829	F-box and WD repeat domain containing 4 Source HGNC Symbol Acc HGNC 10847
C01	UPFH1172907	ENST00000168 712.3	FGF4	ENSG000000 075388	fibroblast growth factor 4 Source HGNC Symbol Acc HGNC 3682
C02	UPFH0457684	ENST00000312 562.6	FOSL1	ENSG000000 175592	FOS like 1, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 13718
C03	UPFH0482655	ENST00000579 795.5	FOXN1	ENSG000000 109101	forkhead box N1 Source HGNC Symbol Acc HGNC 12765
C04	UPFH0606332	ENST00000371 021.4	FRAT1	ENSG000000 165879	FRAT1, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 3944
C05	UPFH1132870	ENST00000295 113.5	FRZB	ENSG000000 162998	frizzled related protein Source HGNC Symbol Acc HGNC 3959
C06	UPFH0039775	ENST00000287 934.3	FZD1	ENSG000000 157240	frizzled class receptor 1 Source HGNC Symbol Acc HGNC 4038
C07	UPFH0607599	ENST00000315 323.4	FZD2	ENSG000000 180340	frizzled class receptor 2 Source HGNC Symbol Acc HGNC 4040
C08	UPFH1132405	ENST00000537 916.2	FZD3	ENSG000000 104290	frizzled class receptor 3 Source HGNC Symbol Acc HGNC 4041
C09	UPFH1132406	ENST00000531 380.2	FZD4	ENSG000000 174804	frizzled class receptor 4 Source HGNC Symbol Acc HGNC 4042
C10	UPFH1132407	ENST00000295 417.4	FZD5	ENSG000000 163251	frizzled class receptor 5 Source HGNC Symbol Acc HGNC 4043
		ENST00000523		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132408	739.5	FZD6	164930	frizzled class receptor 6 Source HGNC Symbol Acc HGNC 4044
C12	UPFH0485950	ENST00000286201.2	FZD7	ENSG00000155760	frizzled class receptor 7 Source HGNC Symbol Acc HGNC 4045
D01	UPFH0494687	ENST000003374694.2	FZD8	ENSG00000177283	frizzled class receptor 8 Source HGNC Symbol Acc HGNC 4046
D02	UPFH0444740	ENST000003344575.4	FZD9	ENSG00000188763	frizzled class receptor 9 Source HGNC Symbol Acc HGNC 4047
D03	UPFH1132428	ENST000003398249.8	GSK3A	ENSG00000105723	glycogen synthase kinase 3 alpha Source HGNC Symbol Acc HGNC 4616
D04	UPFH0470775	ENST000003316626.5	GSK3B	ENSG00000082701	glycogen synthase kinase 3 beta Source HGNC Symbol Acc HGNC 4617
D05	UPFH0569765	ENST000003371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
D06	UPFH0433367	ENST00000400335.8	KREMEN1	ENSG00000183762	kringle containing transmembrane protein 1 Source HGNC Symbol Acc HGNC 17550
D07	UPFH1132518	ENST00000438313.6	LEF1	ENSG00000138795	lymphoid enhancer binding factor 1 Source HGNC Symbol Acc HGNC 6551
D08	UPFH1132877	ENST00000294304.12	LRP5	ENSG00000162337	LDL receptor related protein 5 Source HGNC Symbol Acc HGNC 6697
D09	UPFH1132525	ENST00000543091.1	LRP6	ENSG00000070018	LDL receptor related protein 6 Source HGNC Symbol Acc HGNC 6698
D10	UPFH1132535	ENST000003374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D11	UPFH0230006	ENST00000260227.5	MMP7	ENSG00000137673	matrix metalloproteinase 7 Source HGNC Symbol Acc HGNC 7174
D12	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E01	UPFH0595445	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
E02	UPFH1132895	ENST00000268459.6	NKD1	ENSG00000140807	NKD1, WNT signaling pathway inhibitor Source HGNC Symbol Acc HGNC 17045
E03	UPFH1132593	ENST00000407008.8	NLK	ENSG00000087095	nemo like kinase Source HGNC Symbol Acc HGNC 29858
E04	UPFH0543151	ENST00000607868.1	PITX2	ENSG00000164093	paired like homeodomain 2 Source HGNC Symbol Acc HGNC 9005
E05	UPFH1132626	ENST000003361988.7	PORCN	ENSG00000102312	porcupine O-acyltransferase Source HGNC Symbol Acc HGNC 17652
E06	UPFH1132629	ENST00000448077.6	PPARD	ENSG00000112033	peroxisome proliferator activated receptor delta Source HGNC Symbol Acc HGNC 9235
E07	UPFH1132633	ENST00000445766.7	PRICKLE1	ENSG00000139174	prickle planar cell polarity protein 1 Source HGNC Symbol Acc HGNC 17019
E08	UPFH1125818	ENST00000302000.10	PYGO1	ENSG00000171016	pygopus family PHD finger 1 Source HGNC Symbol Acc HGNC 30256
E09	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
E10	UPFH0350717	ENST000003366691.4	RHOU	ENSG00000116574	ras homolog family member U Source HGNC Symbol Acc HGNC 17794
E11	UPFH1132666	ENST00000478892.1	RUVBL1	ENSG00000175792	RuvB like AAA ATPase 1 Source HGNC Symbol Acc HGNC 10474
E12	UPFH1132676	ENST00000220772.8	SFRP1	ENSG00000104332	secreted frizzled related protein 1 Source HGNC Symbol Acc HGNC 10776
F01	UPFH1132677	ENST00000436072.7	SFRP4	ENSG00000106483	secreted frizzled related protein 4 Source HGNC Symbol Acc HGNC 10778
F02	UPFH1132969	ENST00000297316.5	SOX17	ENSG00000164736	SRY-box 17 Source HGNC Symbol Acc HGNC 18122
F03	UPFH1132709	ENST00000520958.5	TCF7	ENSG00000081059	transcription factor 7 Source HGNC Symbol Acc HGNC 11639
F04	UPFH1132710	ENST00000282111.4	TCF7L1	ENSG00000152284	transcription factor 7 like 1 Source HGNC Symbol Acc HGNC 11640
F05	UPFH1132727	ENST000003376499.8	TLE1	ENSG00000196781	TLE family member 1, transcriptional corepressor Source HGNC Symbol Acc HGNC 11837
F06	UPFH1132754	ENST000003368061.3	VANGL2	ENSG00000162738	VANGL planar cell polarity protein 2 Source HGNC Symbol Acc HGNC 15511
F07	UPFH1132759	ENST00000286574.9	WIF1	ENSG00000156076	WNT inhibitory factor 1 Source HGNC Symbol Acc HGNC 18081
F08	UPFH0155085	ENST00000220856.6	CCN4	ENSG00000104415	cellular communication network factor 4 Source HGNC Symbol Acc HGNC 12769
F09	UPFH0344484	ENST00000293549.3	WNT1	ENSG00000125084	Wnt family member 1 Source HGNC Symbol Acc HGNC 12774
F10	UPFH1172916	ENST00000258411.8	WNT10A	ENSG00000135925	Wnt family member 10A Source HGNC Symbol Acc HGNC 13829

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132929	ENST00000322563.8	WNT11	ENSG00000085741	Wnt family member 11 Source HGNC Symbol Acc HGNC 12776
F12	UPFH1132761	ENST00000361301.6	WNT16	ENSG00000002745	Wnt family member 16 Source HGNC Symbol Acc HGNC 16267
G01	UPFH0138379	ENST00000265441.7	WNT2	ENSG00000105989	Wnt family member 2 Source HGNC Symbol Acc HGNC 12780
G02	UPFH0204669	ENST00000369686.9	WNT2B	ENSG00000134245	Wnt family member 2B Source HGNC Symbol Acc HGNC 12781
G03	UPFH1132762	ENST00000225512.6	WNT3	ENSG00000108379	Wnt family member 3 Source HGNC Symbol Acc HGNC 12782
G04	UPFH0486867	ENST00000284523.2	WNT3A	ENSG00000154342	Wnt family member 3A Source HGNC Symbol Acc HGNC 15983
G05	UPFH1132763	ENST00000290167.11	WNT4	ENSG00000162552	Wnt family member 4 Source HGNC Symbol Acc HGNC 12783
G06	UPFH0355989	ENST00000264634.8	WNT5A	ENSG00000114251	Wnt family member 5A Source HGNC Symbol Acc HGNC 12784
G07	UPFH1132764	ENST00000537031.5	WNT5B	ENSG00000111186	Wnt family member 5B Source HGNC Symbol Acc HGNC 16265
G08	UPFH1132765	ENST00000233948.4	WNT6	ENSG00000115596	Wnt family member 6 Source HGNC Symbol Acc HGNC 12785
G09	UPFH0406663	ENST00000285018.4	WNT7A	ENSG00000154764	Wnt family member 7A Source HGNC Symbol Acc HGNC 12786
G10	UPFH1132766	ENST00000410058.1	WNT7B	ENSG00000188064	Wnt family member 7B Source HGNC Symbol Acc HGNC 12787
G11	UPFH0320758	ENST00000398754.1	WNT8A	ENSG00000061492	Wnt family member 8A Source HGNC Symbol Acc HGNC 12788
G12	UPFH0030443	ENST00000272164.6	WNT9A	ENSG00000143816	Wnt family member 9A Source HGNC Symbol Acc HGNC 12778
H01	UPFH1132936	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544417.5	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229239.10	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392514.9	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	UPFH1126608	UPL_HGDC	HGDC	UPL_HGDC	Human 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.

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