

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

## Human GPCR Signaling PathwayFinder

Cat. no. 249955 UPHS-071ZA

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
A	ADCY5	ADORA2A	ADRB1	ADRB2	AGT	AGTR1	AGTR2	AGTRAP	AKT1	ARRB1	ARRB2	ADGRB1
B	BCL2	BCL2L1	CALCR	CALCLL	CASR	CCL2	CCL4	CCND1	CCNE1	CCNE2	CDKN1A	CDKN1B
C	CFLAR	COL1A1	CRHR1	CRHR2	CCN2	CYP19A1	DRD1	DRD2	DUSP14	EDN1	EGR1	ELK1
D	ELK4	FGF2	FOS	GALR2	GCGR	GNAQ	GNAS	GRM1	GRM2	GRM4	GRM5	GRM7
E	ICAM1	IL1B	IL1R1	IL1R2	IL2	JUN	JUNB	LHCGR	LPAR1	LPAR2	MAX	MMP9
F	MYC	NOS2	OPRD1	OPRK1	PDPK1	PIK3CG	PRKCA	PTGDR	PTGS2	PTH1R	RGS2	RHO
G	S1PR1	S1PR2	S1PR3	SCTR	SERPINE1	SOCS1	TNF	TSHR	UCP1	VCAM1	VEGFA	YWHAZ
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	UPFH0264829	ENST00000468683.1	ADCY5	ENSG00000173175	adenylate cyclase 5 Source HGNC Symbol Acc HGNC 236
A02	UPFH0043185	ENST00000467385.5	ADORA2A	ENSG00000128271	adenosine A2a receptor Source HGNC Symbol Acc HGNC 263
A03	UPFH0612978	ENST00000369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A04	UPFH0552004	ENST00000305988.5	ADRB2	ENSG00000169252	adrenoceptor beta 2 Source HGNC Symbol Acc HGNC 286
A05	UPFH1132773	ENST00000366667.5	AGT	ENSG00000135744	angiotensinogen Source HGNC Symbol Acc HGNC 333
A06	UPFH1132221	ENST00000418473.6	AGTR1	ENSG00000144891	angiotensin II receptor type 1 Source HGNC Symbol Acc HGNC 336
A07	UPFH0421549	ENST00000371906.5	AGTR2	ENSG00000180772	angiotensin II receptor type 2 Source HGNC Symbol Acc HGNC 338
A08	UPFH0450953	ENST00000491346.5	AGTRAP	ENSG00000177674	angiotensin II receptor associated protein Source HGNC Symbol Acc HGNC 13539
A09	UPFH0453992	ENST0000055528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A10	UPFH0570369	ENST00000529280.5	ARRB1	ENSG00000137486	arrestin beta 1 Source HGNC Symbol Acc HGNC 711
A11	UPFH0535152	ENST00000574502.5	ARRB2	ENSG00000141480	arrestin beta 2 Source HGNC Symbol Acc HGNC 712
A12	UPFH0051538	ENST00000323289.6	ADGRB1	ENSG00000181790	adhesion G protein-coupled receptor B1 Source HGNC Symbol Acc HGNC 943
B01	UPFH1132900	ENST00000333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
B02	UPFH1132271	ENST00000376062.6	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
B03	UPFH0236099	ENST00000415529.2	CALCR	ENSG00000004948	calcitonin receptor Source HGNC Symbol Acc HGNC 1440
B04	UPFH0161556	ENST00000392370.8	CALCRL	ENSG00000064989	calcitonin receptor like receptor Source HGNC Symbol Acc HGNC 16709
B05	UPFH0186858	ENST00000638421.1	CASR	ENSG00000036828	calcium sensing receptor Source HGNC Symbol Acc HGNC 1514
B06	UPFH1132783	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
B07	UPFH1132785	ENST00000615863.2	CCL4	ENSG00000275302	C-C motif chemokine ligand 4 Source HGNC Symbol Acc HGNC 10630
B08	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B09	UPFH1132297	ENST00000444983.6	CCNE1	ENSG00000105173	cyclin E1 Source HGNC Symbol Acc HGNC 1589
B10	UPFH0612848	ENST00000520509.5	CCNE2	ENSG00000175305	cyclin E2 Source HGNC Symbol Acc HGNC 1590
B11	UPFH0312181	ENST00000244741.9	CDKN1A	ENSG00000124762	cyclin dependent kinase inhibitor 1A Source HGNC Symbol Acc HGNC 1784
B12	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
C01	UPFH1132312	ENST00000479953.6	CFLAR	ENSG00000003402	CASP8 and FADD like apoptosis regulator Source HGNC Symbol Acc HGNC 1876
C02	UPFH0361104	ENST00000225964.9	COL1A1	ENSG00000108821	collagen type I alpha 1 chain Source HGNC Symbol Acc HGNC 2197
C03	UPFH0116002	ENST00000352855.9	CRHR1	ENSG00000120088	corticotropin releasing hormone receptor 1 Source HGNC Symbol Acc HGNC 2357
C04	UPFH0078515	ENST00000341843.8	CRHR2	ENSG00000106113	corticotropin releasing hormone receptor 2 Source HGNC Symbol Acc HGNC 2358
C05	UPFH1132340	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
C06	UPFH0371849	ENST00000439712.6	CYP19A1	ENSG00000137869	cytochrome P450 family 19 subfamily A member 1 Source HGNC Symbol Acc HGNC 2594
C07	UPFH0033353	ENST00000393752.3	DRD1	ENSG00000184845	dopamine receptor D1 Source HGNC Symbol Acc HGNC 3020
C08	UPFH0281781	ENST00000540600.5	DRD2	ENSG00000149295	dopamine receptor D2 Source HGNC Symbol Acc HGNC 3023
C09	UPFH0065211	ENST00000614411.1	DUSP14	ENSG00000276023	dual specificity phosphatase 14 Source HGNC Symbol Acc HGNC 17007
C10	UPFH1132801	ENST00000379375.6	EDN1	ENSG00000078401	endothelin 1 Source HGNC Symbol Acc HGNC 3176
		ENST00000239		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0558832	938.5	EGR1	120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C12	UPFH0614738	ENST00000376983.8	ELK1	ENSG00000126767	ELK1, ETS transcription factor Source HGNC Symbol Acc HGNC 3321
D01	UPFH0127867	ENST00000616704.4	ELK4	ENSG00000158711	ELK4, ETS transcription factor Source HGNC Symbol Acc HGNC 3326
D02	UPFH0613093	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
D03	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
D04	UPFH0081213	ENST00000329003.4	GALR2	ENSG00000182687	galanin receptor 2 Source HGNC Symbol Acc HGNC 4133
D05	UPFH0164429	ENST00000573428.1	GCGR	ENSG00000215644	glucagon receptor Source HGNC Symbol Acc HGNC 4192
D06	UPFH0119484	ENST00000411677.1	GNAQ	ENSG00000156052	G protein subunit alpha q Source HGNC Symbol Acc HGNC 4390
D07	UPFH0604418	ENST00000371085.7	GNAS	ENSG00000087460	GNAS complex locus Source HGNC Symbol Acc HGNC 4392
D08	UPFH0087489	ENST00000282753.6	GRM1	ENSG00000152822	glutamate metabotropic receptor 1 Source HGNC Symbol Acc HGNC 4593
D09	UPFH0077091	ENST00000442933.2	GRM2	ENSG00000164082	glutamate metabotropic receptor 2 Source HGNC Symbol Acc HGNC 4594
D10	UPFH0580909	ENST00000455714.6	GRM4	ENSG00000124493	glutamate metabotropic receptor 4 Source HGNC Symbol Acc HGNC 4596
D11	UPFH0485590	ENST00000305447.4	GRM5	ENSG00000168959	glutamate metabotropic receptor 5 Source HGNC Symbol Acc HGNC 4597
D12	UPFH0562819	ENST00000440923.7	GRM7	ENSG00000196277	glutamate metabotropic receptor 7 Source HGNC Symbol Acc HGNC 4599
E01	UPFH1132462	ENST00000264832.8	ICAM1	ENSG00000090339	intercellular adhesion molecule 1 Source HGNC Symbol Acc HGNC 5344
E02	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
E03	UPFH1132482	ENST00000442590.5	IL1R1	ENSG00000115594	interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993
E04	UPFH0176161	ENST00000441002.1	IL1R2	ENSG00000115590	interleukin 1 receptor type 2 Source HGNC Symbol Acc HGNC 5994
E05	UPFH0116492	ENST00000226730.4	IL2	ENSG00000109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
E06	UPFH0569765	ENST00000371222.3	JUN	ENSG00000177606	Jun proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6204
E07	UPFH1132504	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
E08	UPFH0476786	ENST00000428232.2	LHCGR	ENSG00000138039	luteinizing hormone/choriogonadotropin receptor Source HGNC Symbol Acc HGNC 6585
E09	UPFH1125976	ENST00000374431.7	LPAR1	ENSG00000198121	lysophosphatidic acid receptor 1 Source HGNC Symbol Acc HGNC 3166
E10	UPFH0554924	ENST00000586703.1	LPAR2	ENSG00000064547	lysophosphatidic acid receptor 2 Source HGNC Symbol Acc HGNC 3168
E11	UPFH0191124	ENST00000556443.5	MAX	ENSG00000125952	MYC associated factor X Source HGNC Symbol Acc HGNC 6913
E12	UPFH0367626	ENST00000372330.3	MMP9	ENSG00000100985	matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176
F01	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
F02	UPFH0572128	ENST00000313735.10	NOS2	ENSG00000007171	nitric oxide synthase 2 Source HGNC Symbol Acc HGNC 7873
F03	UPFH0369959	ENST00000621425.1	OPRD1	ENSG00000116329	opioid receptor delta 1 Source HGNC Symbol Acc HGNC 8153
F04	UPFH0119876	ENST00000520287.5	OPRK1	ENSG00000082556	opioid receptor kappa 1 Source HGNC Symbol Acc HGNC 8154
F05	UPFH0104991	ENST00000389224.7	PDPK1	ENSG00000140992	3-phosphoinositide dependent protein kinase 1 Source HGNC Symbol Acc HGNC 8816
F06	UPFH0562261	ENST00000473541.5	PIK3CG	ENSG00000105851	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma Source HGNC Symbol Acc HGNC 8978
F07	UPFH0607768	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F08	UPFH0479122	ENST00000306051.2	PTGDR	ENSG00000168229	prostaglandin D2 receptor Source HGNC Symbol Acc HGNC 9591
F09	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F10	UPFH0420737	ENST00000313049.9	PTH1R	ENSG00000160801	parathyroid hormone 1 receptor Source HGNC Symbol Acc HGNC 9608

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132656	ENST00000235382.7	RGS2	ENSG00000116741	regulator of G protein signaling 2 Source HGNC Symbol Acc HGNC 9998
F12	UPFH0277028	ENST00000296271.3	RHO	ENSG00000163914	rhodopsin Source HGNC Symbol Acc HGNC 10012
G01	UPFH0376099	ENST00000305352.6	S1PR1	ENSG00000170989	sphingosine-1-phosphate receptor 1 Source HGNC Symbol Acc HGNC 3165
G02	UPFH0098417	ENST00000646641.1	S1PR2	ENSG00000267534	sphingosine-1-phosphate receptor 2 Source HGNC Symbol Acc HGNC 3169
G03	UPFH0040688	ENST00000358157.3	S1PR3	ENSG00000213694	sphingosine-1-phosphate receptor 3 Source HGNC Symbol Acc HGNC 3167
G04	UPFH0433502	ENST00000019103.7	SCTR	ENSG00000080293	secretin receptor Source HGNC Symbol Acc HGNC 10608
G05	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
G06	UPFH1132887	ENST00000644787.1	SOCS1	ENSG00000185338	suppressor of cytokine signaling 1 Source HGNC Symbol Acc HGNC 19383
G07	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G08	UPFH0026674	ENST00000554263.5	TSHR	ENSG00000165409	thyroid stimulating hormone receptor Source HGNC Symbol Acc HGNC 12373
G09	UPFH0141236	ENST00000262999.4	UCP1	ENSG00000109424	uncoupling protein 1 Source HGNC Symbol Acc HGNC 12517
G10	UPFH1132856	ENST00000294728.7	VCAM1	ENSG00000162692	vascular cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 12663
G11	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	UPFH0518715	ENST00000522819.5	YWHAZ	ENSG00000164924	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein zeta Source HGNC Symbol Acc HGNC 12855
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.

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