

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

## Human cAMP / Calcium Signaling PathwayFinder

Cat. no. 249955 UPHS-066ZR

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	ADRB1	AHR	AMD1	AREG	ATF3	BCL2	BDNF	BRCA1	CALB1	CALB2	CALM1	CALR
B	CCNA1	CCND1	CDK5	CDKN2B	CGA	CHGA	CNN1	CREB1	CREM	CTF1	CCN1	DDIT3
C	DUSP1	EGR1	EGR2	ENO2	FGF6	FOS	FOSB	GCG	GEM	GIPR	HK2	HSPA4
D	HSPA5	IL2	IL6	INHBA	JUNB	JUND	KCNA5	LDHA	MAF	MIF	NCAM1	NF1
E	NOS2	NPY	NR4A2	PCK2	PCNA	PENK	PER1	PLAT	PLN	PMAIP1	POU1F1	POU2AF1
F	PPP1R15A	PPP2CA	PRKAR1A	PRL	PTGS2	RB1	S100A12	S100A6	S100G	SCG2	SGK1	SLC18A1
G	SOD2	SRF	SST	SSTR2	STAT3	TACR1	TGFB3	TH	THBS1	TNF	VCL	VIP
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	UPFH0612978	ENST00000369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A02	UPFH0406527	ENST00000463496.1	AHR	ENSG00000106546	aryl hydrocarbon receptor Source HGNC Symbol Acc HGNC 348
A03	UPFH0344747	ENST00000368885.8	AMD1	ENSG00000123505	adenosylmethionine decarboxylase 1 Source HGNC Symbol Acc HGNC 457
A04	UPFH0307368	ENST00000502307.1	AREG	ENSG00000109321	amphiregulin Source HGNC Symbol Acc HGNC 651
A05	UPFH0133410	ENST00000366985.5	ATF3	ENSG00000162772	activating transcription factor 3 Source HGNC Symbol Acc HGNC 785
A06	UPFH1132900	ENST00000333681.5	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A07	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A08	UPFH1132279	ENST00000461574.1	BRCA1	ENSG00000012048	BRCA1, DNA repair associated Source HGNC Symbol Acc HGNC 1100
A09	UPFH0585207	ENST00000265431.7	CALB1	ENSG00000104327	calbindin 1 Source HGNC Symbol Acc HGNC 1434
A10	UPFH0521788	ENST00000302628.9	CALB2	ENSG00000172137	calbindin 2 Source HGNC Symbol Acc HGNC 1435
A11	UPFH0489153	ENST00000555267.1	CALM1	ENSG00000198668	calmodulin 1 Source HGNC Symbol Acc HGNC 1442
A12	UPFH0025967	ENST00000316448.9	CALR	ENSG00000179218	calreticulin Source HGNC Symbol Acc HGNC 1455
B01	UPFH0417476	ENST00000255465.7	CCNA1	ENSG00000133101	cyclin A1 Source HGNC Symbol Acc HGNC 1577
B02	UPFH0430337	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B03	UPFH0609948	ENST00000485972.6	CDK5	ENSG00000164885	cyclin dependent kinase 5 Source HGNC Symbol Acc HGNC 1774
B04	UPFH0150846	ENST00000579591.1	CDKN2B	ENSG00000147883	cyclin dependent kinase inhibitor 2B Source HGNC Symbol Acc HGNC 1788
B05	UPFH0010534	ENST00000630630.2	CGA	ENSG00000135346	glycoprotein hormones, alpha polypeptide Source HGNC Symbol Acc HGNC 1885
B06	UPFH0519534	ENST00000334654.4	CHGA	ENSG00000100604	chromogranin A Source HGNC Symbol Acc HGNC 1929
B07	UPFH0219249	ENST00000587087.5	CNN1	ENSG00000130176	calponin 1 Source HGNC Symbol Acc HGNC 2155
B08	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B09	UPFH0269005	ENST00000439705.5	CREM	ENSG00000095794	cAMP responsive element modulator Source HGNC Symbol Acc HGNC 2352
B10	UPFH0021251	ENST00000279804.2	CTF1	ENSG00000150281	cardiotrophin 1 Source HGNC Symbol Acc HGNC 2499
B11	UPFH0062284	ENST00000480413.1	CCN1	ENSG00000142871	cellular communication network factor 1 Source HGNC Symbol Acc HGNC 2654
B12	UPFH0523891	ENST00000346473.7	DDIT3	ENSG00000175197	DNA damage inducible transcript 3 Source HGNC Symbol Acc HGNC 2726
C01	UPFH1132372	ENST00000239223.4	DUSP1	ENSG00000120129	dual specificity phosphatase 1 Source HGNC Symbol Acc HGNC 3064
C02	UPFH0558832	ENST00000239938.5	EGR1	ENSG00000120738	early growth response 1 Source HGNC Symbol Acc HGNC 3238
C03	UPFH0318489	ENST00000242480.4	EGR2	ENSG00000122877	early growth response 2 Source HGNC Symbol Acc HGNC 3239
C04	UPFH1132384	ENST00000541477.5	ENO2	ENSG00000111674	enolase 2 Source HGNC Symbol Acc HGNC 3353
C05	UPFH0181682	ENST00000228837.2	FGF6	ENSG00000111241	fibroblast growth factor 6 Source HGNC Symbol Acc HGNC 3684
C06	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C07	UPFH0526329	ENST00000585836.5	FOSB	ENSG00000125740	FosB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3797
C08	UPFH0034982	ENST00000418842.7	GCG	ENSG00000115263	glucagon Source HGNC Symbol Acc HGNC 4191
C09	UPFH0567634	ENST00000396194.6	GEM	ENSG00000164949	GTP binding protein overexpressed in skeletal muscle Source HGNC Symbol Acc HGNC 4234
C10	UPFH0475089	ENST00000585889.1	GIPR	ENSG000000101310	gastric inhibitory polypeptide receptor Source HGNC Symbol Acc HGNC 4271
		ENST00000409		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132910	174.1	HK2	159399	hexokinase 2 Source HGNC Symbol Acc HGNC 4923
C12	UPFH1132457	ENST00000304858.7	HSPA4	ENSG00000170606	heat shock protein family A (Hsp70) member 4 Source HGNC Symbol Acc HGNC 5237
D01	UPFH1132459	ENST0000030460.7	HSPA5	ENSG00000044574	heat shock protein family A (Hsp70) member 5 Source HGNC Symbol Acc HGNC 5238
D02	UPFH0116492	ENST00000226730.4	IL2	ENSG00000109471	interleukin 2 Source HGNC Symbol Acc HGNC 6001
D03	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D04	UPFH1132486	ENST00000242208.5	INHBA	ENSG00000122641	inhibin subunit beta A Source HGNC Symbol Acc HGNC 6066
D05	UPFH1132504	ENST00000302754.6	JUNB	ENSG00000171223	JunB proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6205
D06	UPFH0044624	ENST00000252818.4	JUND	ENSG00000130522	JunD proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 6206
D07	UPFH0494049	ENST00000252321.4	KCNA5	ENSG00000130037	potassium voltage-gated channel subfamily A member 5 Source HGNC Symbol Acc HGNC 6224
D08	UPFH1132517	ENST00000422447.8	LDHA	ENSG00000134333	lactate dehydrogenase A Source HGNC Symbol Acc HGNC 6535
D09	UPFH0572800	ENST00000326043.5	MAF	ENSG00000178573	MAF bZIP transcription factor Source HGNC Symbol Acc HGNC 6776
D10	UPFH1132548	ENST00000215754.8	MIF	ENSG00000240972	macrophage migration inhibitory factor Source HGNC Symbol Acc HGNC 7097
D11	UPFH0013835	ENST00000531044.5	NCAM1	ENSG00000149294	neural cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 7656
D12	UPFH0158363	ENST00000431387.8	NF1	ENSG00000196712	neurofibromin 1 Source HGNC Symbol Acc HGNC 7765
E01	UPFH0572128	ENST00000313735.10	NOS2	ENSG00000007171	nitric oxide synthase 2 Source HGNC Symbol Acc HGNC 7873
E02	UPFH0380153	ENST00000407573.5	NPY	ENSG00000122585	neuropeptide Y Source HGNC Symbol Acc HGNC 7955
E03	UPFH0459066	ENST00000406048.2	NR4A2	ENSG00000153234	nuclear receptor subfamily 4 group A member 2 Source HGNC Symbol Acc HGNC 7981
E04	UPFH0165951	ENST00000216780.8	PCK2	ENSG00000100889	phosphoenolpyruvate carboxykinase 2, mitochondrial Source HGNC Symbol Acc HGNC 8725
E05	UPFH1132607	ENST00000379160.3	PCNA	ENSG00000132646	proliferating cell nuclear antigen Source HGNC Symbol Acc HGNC 8729
E06	UPFH0399007	ENST00000523051.5	PENK	ENSG00000181195	proenkephalin Source HGNC Symbol Acc HGNC 8831
E07	UPFH0100494	ENST00000581395.5	PER1	ENSG00000179094	period circadian regulator 1 Source NCBI gene Acc 5187
E08	UPFH1132830	ENST00000352041.7	PLAT	ENSG00000104368	plasminogen activator, tissue type Source HGNC Symbol Acc HGNC 9051
E09	UPFH0031505	ENST00000357525.6	PLN	ENSG00000198523	phospholamban Source HGNC Symbol Acc HGNC 9080
E10	UPFH0103346	ENST00000316660.6	PMAIP1	ENSG00000141682	phorbol-12-myristate-13-acetate-induced protein 1 Source HGNC Symbol Acc HGNC 9108
E11	UPFH0229374	ENST00000350375.6	POU1F1	ENSG00000064835	POU class 1 homeobox 1 Source HGNC Symbol Acc HGNC 9210
E12	UPFH0111631	ENST00000529065.1	POU2AF1	ENSG00000110777	POU class 2 associating factor 1 Source HGNC Symbol Acc HGNC 9211
F01	UPFH1132630	ENST00000600406.1	PPP1R15A	ENSG00000087074	protein phosphatase 1 regulatory subunit 15A Source HGNC Symbol Acc HGNC 14375
F02	UPFH0120233	ENST00000522385.1	PPP2CA	ENSG00000113575	protein phosphatase 2 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9299
F03	UPFH0050183	ENST00000586397.5	PRKAR1A	ENSG00000108946	protein kinase cAMP-dependent type I regulatory subunit alpha Source HGNC Symbol Acc HGNC 9388
F04	UPFH0580799	ENST00000615510.4	PRL	ENSG00000172179	prolactin Source HGNC Symbol Acc HGNC 9445
F05	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F06	UPFH0001483	ENST00000267163.5	RB1	ENSG00000139687	RB transcriptional corepressor 1 Source HGNC Symbol Acc HGNC 9884
F07	UPFH0044301	ENST00000368737.5	S100A12	ENSG00000163221	S100 calcium binding protein A12 Source HGNC Symbol Acc HGNC 10489
F08	UPFH0516872	ENST00000462951.2	S100A6	ENSG00000197956	S100 calcium binding protein A6 Source HGNC Symbol Acc HGNC 10496
F09	UPFH0299573	ENST00000380200.3	S100G	ENSG00000169906	S100 calcium binding protein G Source HGNC Symbol Acc HGNC 1436
F10	UPFH0549677	ENST00000305409.3	SCG2	ENSG00000171951	secretogranin II Source HGNC Symbol Acc HGNC 10575

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0010225	ENST00000367855.7	SGK1	ENSG00000118515	serum/glucocorticoid regulated kinase 1 Source HGNC Symbol Acc HGNC 10810
F12	UPFH0546937	ENST00000437980.3	SLC18A1	ENSG00000036565	solute carrier family 18 member A1 Source HGNC Symbol Acc HGNC 10934
G01	UPFH1132692	ENST00000367055.8	SOD2	ENSG00000112096	superoxide dismutase 2 Source HGNC Symbol Acc HGNC 11180
G02	UPFH0179284	ENST00000265354.6	SRF	ENSG00000112658	serum response factor Source HGNC Symbol Acc HGNC 11291
G03	UPFH0158626	ENST00000287641.4	SST	ENSG00000157005	somatostatin Source HGNC Symbol Acc HGNC 11329
G04	UPFH0146676	ENST00000579323.5	SSTR2	ENSG00000180616	somatostatin receptor 2 Source HGNC Symbol Acc HGNC 11331
G05	UPFH0531262	ENST00000404395.3	STAT3	ENSG00000168610	signal transducer and activator of transcription 3 Source HGNC Symbol Acc HGNC 11364
G06	UPFH0340276	ENST00000409848.3	TACR1	ENSG00000115353	tachykinin receptor 1 Source HGNC Symbol Acc HGNC 11526
G07	UPFH0000256	ENST00000238682.7	TGFB3	ENSG00000119699	transforming growth factor beta 3 Source HGNC Symbol Acc HGNC 11769
G08	UPFH0521066	ENST00000412076.1	TH	ENSG00000180176	tyrosine hydroxylase Source HGNC Symbol Acc HGNC 11782
G09	UPFH1132847	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G10	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G11	UPFH0466583	ENST00000478896.2	VCL	ENSG00000035403	vinculin Source HGNC Symbol Acc HGNC 12665
G12	UPFH0571096	ENST00000367243.7	VIP	ENSG00000146469	vasoactive intestinal peptide Source HGNC Symbol Acc HGNC 12693
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.

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.