

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

## Human Obesity

Cat. no. 249955 UPHS-017ZA

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	ADCYAP1	ADCYAP1R1	ADIPOQ	ADIPO1	ADIPO2	ADRA2B	ADRB1	AGRP	APOA4	ATRN	BDNF	BRS3
B	C3	CALCA	CALCR	CARTPT	CCK	CCKAR	CLPS	CNR1	CNTFR	CPD	CPE	CRHR1
C	DRD1	DRD2	GAL	GALR1	GCG	GCGR	GH1	GH2	GHR	GHRL	GHSR	GLP1R
D	GRP	GRPR	HCRT	HCRT1	HRH1	HTR2C	IAPP	IL1A	IL1B	IL1R1	IL6	IL6R
E	INS	INSR	LEP	LEPR	MC3R	MCHR1	NMB	NMBR	NMU	NMUR1	NPY	NPY1R
F	NR3C1	NTRK2	NTS	NTSR1	OPRK1	OPRM1	POMC	PPARA	PPARG	PPARGC1A	PRLHR	PTPN1
G	PYY	RAMP3	SIGMAR1	SORT1	SST	SSTR2	THRB	TNF	TRH	UCN	UCP1	ZFP91
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	UPFH0522587	ENST00000269200.5	ADCYAP1	ENSG00000141433	adenylate cyclase activating polypeptide 1 Source HGNC Symbol Acc HGNC 241
A02	UPFH0499856	ENST000003304166.8	ADCYAP1R1	ENSG00000078549	ADCYAP receptor type I Source HGNC Symbol Acc HGNC 242
A03	UPFH1132772	ENST00000320741.7	ADIPOQ	ENSG00000181092	adiponectin, C1Q and collagen domain containing Source HGNC Symbol Acc HGNC 13633
A04	UPFH0106515	ENST000003367254.7	ADIPOR1	ENSG00000159346	adiponectin receptor 1 Source HGNC Symbol Acc HGNC 24040
A05	UPFH0573163	ENST000003357103.5	ADIPOR2	ENSG00000006831	adiponectin receptor 2 Source HGNC Symbol Acc HGNC 24041
A06	UPFH0039456	ENST00000620793.2	ADRA2B	ENSG00000274286	adrenoceptor alpha 2B Source HGNC Symbol Acc HGNC 282
A07	UPFH0612978	ENST000003369295.3	ADRB1	ENSG00000043591	adrenoceptor beta 1 Source HGNC Symbol Acc HGNC 285
A08	UPFH0293130	ENST00000290953.2	AGRP	ENSG00000159723	agouti related neuropeptide Source HGNC Symbol Acc HGNC 330
A09	UPFH0106154	ENST000003357780.5	APOA4	ENSG00000110244	apolipoprotein A4 Source HGNC Symbol Acc HGNC 602
A10	UPFH0465562	ENST00000446916.2	ATRN	ENSG00000088812	atractin Source HGNC Symbol Acc HGNC 885
A11	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A12	UPFH0135028	ENST000003370648.4	BRS3	ENSG00000102239	bombesin receptor subtype 3 Source HGNC Symbol Acc HGNC 1113
B01	UPFH1132902	ENST00000596548.1	C3	ENSG00000125730	complement C3 Source HGNC Symbol Acc HGNC 1318
B02	UPFH0317713	ENST000003331587.8	CALCA	ENSG00000110680	calcitonin related polypeptide alpha Source HGNC Symbol Acc HGNC 1437
B03	UPFH0236099	ENST00000415529.2	CALCR	ENSG00000004948	calcitonin receptor Source HGNC Symbol Acc HGNC 1440
B04	UPFH0559459	ENST00000513096.1	CARTPT	ENSG00000164326	CART prepropeptide Source HGNC Symbol Acc HGNC 24323
B05	UPFH0102237	ENST000003334681.9	CCK	ENSG00000187094	cholecystokinin Source HGNC Symbol Acc HGNC 1569
B06	UPFH0384581	ENST00000295589.3	CCKAR	ENSG00000163394	cholecystokinin A receptor Source HGNC Symbol Acc HGNC 1570
B07	UPFH0207577	ENST00000616014.3	CLPS	ENSG00000137392	colipase Source HGNC Symbol Acc HGNC 2085
B08	UPFH0389304	ENST00000428600.2	CNR1	ENSG00000118432	cannabinoid receptor 1 Source HGNC Symbol Acc HGNC 2159
B09	UPFH0473053	ENST000003378980.8	CNTFR	ENSG00000122756	ciliary neurotrophic factor receptor Source HGNC Symbol Acc HGNC 2170
B10	UPFH0424015	ENST00000579502.1	CPD	ENSG00000108582	carboxypeptidase D Source HGNC Symbol Acc HGNC 2301
B11	UPFH1124416	ENST00000431967.5	CPE	ENSG00000109472	carboxypeptidase E Source HGNC Symbol Acc HGNC 2303
B12	UPFH0116002	ENST000003352855.9	CRHR1	ENSG00000120088	corticotropin releasing hormone receptor 1 Source HGNC Symbol Acc HGNC 2357
C01	UPFH0033353	ENST00000393752.3	DRD1	ENSG00000184845	dopamine receptor D1 Source HGNC Symbol Acc HGNC 3020
C02	UPFH0281781	ENST00000540600.5	DRD2	ENSG00000149295	dopamine receptor D2 Source HGNC Symbol Acc HGNC 3023
C03	UPFH0370255	ENST00000265643.4	GAL	ENSG00000069482	galanin and GMAP prepropeptide Source HGNC Symbol Acc HGNC 4114
C04	UPFH0203559	ENST00000299727.4	GALR1	ENSG00000166573	galanin receptor 1 Source HGNC Symbol Acc HGNC 4132
C05	UPFH0034982	ENST00000418842.7	GCG	ENSG00000115263	glucagon Source HGNC Symbol Acc HGNC 4191
C06	UPFH0164429	ENST00000573428.1	GCGR	ENSG00000215644	glucagon receptor Source HGNC Symbol Acc HGNC 4192
C07	UPFH0543626	ENST000003342364.8	GH1	ENSG00000259384	growth hormone 1 Source HGNC Symbol Acc HGNC 4261
C08	UPFH0135058	ENST00000449787.6	GH2	ENSG00000136487	growth hormone 2 Source HGNC Symbol Acc HGNC 4262
C09	UPFH0603133	ENST00000230882.9	GHR	ENSG00000112964	growth hormone receptor Source HGNC Symbol Acc HGNC 4263
C10	UPFH0047501	ENST00000287656.11	GHRL	ENSG00000157017	ghrelin and obestatin prepropeptide Source HGNC Symbol Acc HGNC 18129
		ENST00000241		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0415730	256.2	GHSR	121853	growth hormone secretagogue receptor Source HGNC Symbol Acc HGNC 4267
C12	UPFH0517316	ENST00000373 256.5	GLP1R	ENSG00000 112164	glucagon like peptide 1 receptor Source HGNC Symbol Acc HGNC 4324
D01	UPFH0100638	ENST00000529 320.2	GRP	ENSG00000 134443	gastrin releasing peptide Source HGNC Symbol Acc HGNC 4605
D02	UPFH0606195	ENST00000380 289.2	GRPR	ENSG00000 126010	gastrin releasing peptide receptor Source HGNC Symbol Acc HGNC 4609
D03	UPFH0223085	ENST00000293 330.1	HCRT	ENSG00000 161610	hypocretin neuropeptide precursor Source HGNC Symbol Acc HGNC 4847
D04	UPFH0163717	ENST00000485 464.5	HCRT1R	ENSG00000 121764	hypocretin receptor 1 Source HGNC Symbol Acc HGNC 4848
D05	UPFH0089986	ENST00000397 056.1	HRH1	ENSG00000 196639	histamine receptor H1 Source HGNC Symbol Acc HGNC 5182
D06	UPFH0615463	ENST00000371 951.5	HTR2C	ENSG00000 147246	5-hydroxytryptamine receptor 2C Source HGNC Symbol Acc HGNC 5295
D07	UPFH0216579	ENST00000537 593.1	IAPP	ENSG00000 121351	islet amyloid polypeptide Source HGNC Symbol Acc HGNC 5329
D08	UPFH0436255	ENST00000263 339.3	IL1A	ENSG00000 115008	interleukin 1 alpha Source HGNC Symbol Acc HGNC 5991
D09	UPFH0163764	ENST00000263 341.6	IL1B	ENSG00000 125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D10	UPFH1132482	ENST00000442 590.5	IL1R1	ENSG00000 115594	interleukin 1 receptor type 1 Source HGNC Symbol Acc HGNC 5993
D11	UPFH1172910	ENST00000258 743.10	IL6	ENSG00000 136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D12	UPFH1132484	ENST00000622 330.4	IL6R	ENSG00000 160712	interleukin 6 receptor Source HGNC Symbol Acc HGNC 6019
E01	UPFH1132488	ENST00000381 330.4	INS	ENSG00000 254647	insulin Source HGNC Symbol Acc HGNC 6081
E02	UPFH0483358	ENST00000598 216.1	INSR	ENSG00000 171105	insulin receptor Source HGNC Symbol Acc HGNC 6091
E03	UPFH1132519	ENST00000308 868.5	LEP	ENSG00000 174697	leptin Source HGNC Symbol Acc HGNC 6553
E04	UPFH0300038	ENST00000371 060.7	LEPR	ENSG00000 116678	leptin receptor Source HGNC Symbol Acc HGNC 6554
E05	UPFH0503276	ENST00000243 911.2	MC3R	ENSG00000 124089	melanocortin 3 receptor Source HGNC Symbol Acc HGNC 6931
E06	UPFH0584616	ENST00000498 400.1	MCHR1	ENSG00000 128285	melanin concentrating hormone receptor 1 Source HGNC Symbol Acc HGNC 4479
E07	UPFH0537798	ENST00000394 588.3	NMB	ENSG00000 197696	neuromedin B Source HGNC Symbol Acc HGNC 7842
E08	UPFH0445799	ENST00000480 652.1	NMBR	ENSG00000 135577	neuromedin B receptor Source HGNC Symbol Acc HGNC 7843
E09	UPFH0142347	ENST00000507 338.1	NMU	ENSG00000 109255	neuromedin U Source HGNC Symbol Acc HGNC 7859
E10	UPFH0556144	ENST00000305 141.5	NMUR1	ENSG00000 171596	neuromedin U receptor 1 Source HGNC Symbol Acc HGNC 4518
E11	UPFH0380153	ENST00000407 573.5	NPY	ENSG00000 122585	neuropeptide Y Source HGNC Symbol Acc HGNC 7955
E12	UPFH0023593	ENST00000504 391.5	NPY1R	ENSG00000 164128	neuropeptide Y receptor Y1 Source HGNC Symbol Acc HGNC 7956
F01	UPFH1132917	ENST00000394 464.7	NR3C1	ENSG00000 113580	nuclear receptor subfamily 3 group C member 1 Source HGNC Symbol Acc HGNC 7978
F02	UPFH0140055	ENST00000376 208.5	NTRK2	ENSG00000 148053	neurotrophic receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 8032
F03	UPFH0035053	ENST00000551 529.5	NTS	ENSG00000 133636	neurotensin Source HGNC Symbol Acc HGNC 8038
F04	UPFH0126082	ENST00000482 259.1	NTSR1	ENSG00000 101188	neurotensin receptor 1 Source HGNC Symbol Acc HGNC 8039
F05	UPFH0119876	ENST00000520 287.5	OPRK1	ENSG00000 082556	opioid receptor kappa 1 Source HGNC Symbol Acc HGNC 8154
F06	UPFH0581129	ENST00000435 918.6	OPRM1	ENSG00000 112038	opioid receptor mu 1 Source HGNC Symbol Acc HGNC 8156
F07	UPFH0476472	ENST00000449 220.1	POMC	ENSG00000 115138	proopiomelanocortin Source HGNC Symbol Acc HGNC 9201
F08	UPFH0327373	ENST00000262 735.9	PPARA	ENSG00000 186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
F09	UPFH0284890	ENST00000477 039.5	PPARG	ENSG00000 132170	peroxisome proliferator activated receptor gamma Source HGNC Symbol Acc HGNC 9236
F10	UPFH0403608	ENST00000264 867.7	PPARGC1A	ENSG00000 109819	PPARG coactivator 1 alpha Source HGNC Symbol Acc HGNC 9237

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0524807	ENST00000636925.1	PRLHR	ENSG00000119973	prolactin releasing hormone receptor Source HGNC Symbol Acc HGNC 4464
F12	UPFH0306220	ENST00000371621.5	PTPN1	ENSG00000196396	protein tyrosine phosphatase, non-receptor type 1 Source HGNC Symbol Acc HGNC 9642
G01	UPFH0185159	ENST00000360085.6	PYY	ENSG00000131096	peptide YY Source HGNC Symbol Acc HGNC 9748
G02	UPFH0216560	ENST00000496212.5	RAMP3	ENSG00000122679	receptor activity modifying protein 3 Source HGNC Symbol Acc HGNC 9845
G03	UPFH0522016	ENST00000353468.4	SIGMAR1	ENSG00000147955	sigma non-opioid intracellular receptor 1 Source HGNC Symbol Acc HGNC 8157
G04	UPFH0581359	ENST00000483508.5	SORT1	ENSG00000134243	sortilin 1 Source HGNC Symbol Acc HGNC 11186
G05	UPFH0158626	ENST00000287641.4	SST	ENSG00000157005	somatostatin Source HGNC Symbol Acc HGNC 11329
G06	UPFH0146676	ENST00000579323.5	SSTR2	ENSG00000180616	somatostatin receptor 2 Source HGNC Symbol Acc HGNC 11331
G07	UPFH0145963	ENST00000447875.5	THRB	ENSG00000151090	thyroid hormone receptor beta Source HGNC Symbol Acc HGNC 11799
G08	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G09	UPFH0610924	ENST00000302649.4	TRH	ENSG00000170893	thyrotropin releasing hormone Source HGNC Symbol Acc HGNC 12298
G10	UPFH1125579	ENST00000296099.2	UCN	ENSG00000163794	urocortin Source HGNC Symbol Acc HGNC 12516
G11	UPFH0141236	ENST00000262999.4	UCP1	ENSG00000109424	uncoupling protein 1 Source HGNC Symbol Acc HGNC 12517
G12	UPFH0110987	ENST00000316059.7	ZFP91	ENSG00000186660	ZFP91 zinc finger protein Source HGNC Symbol Acc HGNC 14983
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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