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

Human TGFb Signaling Targets

Cat. no. 249955 UPHS-235ZA

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	ACTA2	ACVR1	ACVRL1	AGT	AIPL1	AR	ATF3	ATF4	BACH1	BCL2L1	BDNF	BHLHE40
B	BRD2	CDC6	CDKN1B	CEBPB	CREB1	CREBBP	CRYAB	CTNNB1	DNAJA1	E2F4	EMP1	ENG
C	EP300	EPHB2	FN1	FOS	FURIN	GADD45B	GLI2	GTF2I	HERPUD1	HES1	HEY1	HMOX1
D	ID1	ID2	ID3	IFRD1	IL10	KLF10	MAP3K7	MAPK14	MAPK8	MBD1	MMP2	MSX2
E	MYC	MYOD1	NFIB	NFKBIA	NOTCH1	PDGFA	PLG	PPARA	PTGS2	PTHLH	PTK2	PTK2B
F	RAD21	RARA	RBL1	RHOA	RHOB	RUNX1	RYBP	S100A8	SERPINE1	SHH	SMAD1	SMAD3
G	SMAD5	SMAD6	SNAI1	SOX4	SP1	SREBF2	TGFB2	TGFBR2	THBS1	TNFSF10	TXNIP	VEGFA
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	UPFH0537484	ENST00000224784.10	ACTA2	ENSG00000107796	actin, alpha 2, smooth muscle, aorta Source HGNC Symbol Acc HGNC 130
A02	UPFH0312963	ENST00000539637.5	ACVR1	ENSG00000115170	activin A receptor type 1 Source HGNC Symbol Acc HGNC 171
A03	UPFH0438756	ENST00000419526.6	ACVRL1	ENSG00000139567	activin A receptor like type 1 Source HGNC Symbol Acc HGNC 175
A04	UPFH1132773	ENST00000366667.5	AGT	ENSG00000135744	angiotensinogen Source HGNC Symbol Acc HGNC 333
A05	UPFH0242825	ENST00000574506.5	AIPL1	ENSG00000129221	aryl hydrocarbon receptor interacting protein like 1 Source HGNC Symbol Acc HGNC 359
A06	UPFH0268128	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
A07	UPFH0133410	ENST00000366985.5	ATF3	ENSG00000162772	activating transcription factor 3 Source HGNC Symbol Acc HGNC 785
A08	UPFH1132244	ENST00000404241.6	ATF4	ENSG00000128272	activating transcription factor 4 Source HGNC Symbol Acc HGNC 786
A09	UPFH0484630	ENST00000447177.5	BACH1	ENSG00000156273	BTB domain and CNC homolog 1 Source HGNC Symbol Acc HGNC 935
A10	UPFH1132271	ENST00000376062.6	BCL2L1	ENSG00000171552	BCL2 like 1 Source HGNC Symbol Acc HGNC 992
A11	UPFH0520944	ENST00000525528.1	BDNF	ENSG00000176697	brain derived neurotrophic factor Source HGNC Symbol Acc HGNC 1033
A12	UPFH0490613	ENST00000460806.1	BHLHE40	ENSG00000134107	basic helix-loop-helix family member e40 Source HGNC Symbol Acc HGNC 1046
B01	UPFH0358715	ENST00000481259.1	BRD2	ENSG00000204256	bromodomain containing 2 Source HGNC Symbol Acc HGNC 1103
B02	UPFH0076379	ENST00000647931.2	CDC6	ENSG00000094804	cell division cycle 6 Source HGNC Symbol Acc HGNC 1744
B03	UPFH1132964	ENST00000228872.9	CDKN1B	ENSG00000111276	cyclin dependent kinase inhibitor 1B Source HGNC Symbol Acc HGNC 1785
B04	UPFH0202295	ENST00000303004.4	CEBPB	ENSG00000172216	CCAAT enhancer binding protein beta Source HGNC Symbol Acc HGNC 1834
B05	UPFH0199960	ENST00000480189.5	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B06	UPFH0338543	ENST00000573517.6	CREBBP	ENSG00000005339	CREB binding protein Source HGNC Symbol Acc HGNC 2348
B07	UPFH0205096	ENST00000527950.5	CRYAB	ENSG00000109846	crystallin alpha B Source HGNC Symbol Acc HGNC 2389
B08	UPFH0097734	ENST00000396183.7	CTNNB1	ENSG00000168036	catenin beta 1 Source HGNC Symbol Acc HGNC 2514
B09	UPFH0149656	ENST00000465677.1	DNAJA1	ENSG00000086061	DnaJ heat shock protein family (Hsp40) member A1 Source HGNC Symbol Acc HGNC 5229
B10	UPFH1132376	ENST00000379378.8	E2F4	ENSG00000205250	E2F transcription factor 4 Source HGNC Symbol Acc HGNC 3118
B11	UPFH1132383	ENST00000256951.10	EMP1	ENSG00000134531	epithelial membrane protein 1 Source HGNC Symbol Acc HGNC 3333
B12	UPFH0535657	ENST00000344849.4	ENG	ENSG00000106991	endoglin Source HGNC Symbol Acc HGNC 3349
C01	UPFH0118049	ENST00000635691.1	EP300	ENSG00000100393	E1A binding protein p300 Source HGNC Symbol Acc HGNC 3373
C02	UPFH0385602	ENST00000465676.1	EPHB2	ENSG00000133216	EPH receptor B2 Source HGNC Symbol Acc HGNC 3393
C03	UPFH0605066	ENST00000336916.8	FN1	ENSG00000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C04	UPFH1132401	ENST00000555242.1	FOS	ENSG00000170345	Fos proto-oncogene, AP-1 transcription factor subunit Source HGNC Symbol Acc HGNC 3796
C05	UPFH0173425	ENST00000558794.1	FURIN	ENSG00000140564	furin, paired basic amino acid cleaving enzyme Source HGNC Symbol Acc HGNC 8568
C06	UPFH1132414	ENST00000215631.9	GADD45B	ENSG00000099860	growth arrest and DNA damage inducible beta Source HGNC Symbol Acc HGNC 4096
C07	UPFH0462614	ENST00000435313.6	GLI2	ENSG00000074047	GLI family zinc finger 2 Source HGNC Symbol Acc HGNC 4318
C08	UPFH1132431	ENST00000614986.4	GTF2I	ENSG00000263001	general transcription factor IIi Source HGNC Symbol Acc HGNC 4659
C09	UPFH1132441	ENST00000379792.6	HERPUD1	ENSG00000051108	homocysteine inducible ER protein with ubiquitin like domain 1 Source HGNC Symbol Acc HGNC 13744
C10	UPFH1132442	ENST00000232424.4	HES1	ENSG00000114315	hes family bHLH transcription factor 1 Source HGNC Symbol Acc HGNC 5192
		ENST00000354		ENSG00000	hes related family bHLH transcription factor with YRPW motif 1 Source HGNC

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132444	724.8	HEY1	164683	Symbol Acc HGNC 4880
C12	UPFH0433285	ENST00000216117.9	HMOX1	ENSG00000100292	heme oxygenase 1 Source HGNC Symbol Acc HGNC 5013
D01	UPFH1132463	ENST00000376112.4	ID1	ENSG00000125968	inhibitor of DNA binding 1, HLH protein Source HGNC Symbol Acc HGNC 5360
D02	UPFH1132464	ENST00000331129.3	ID2	ENSG00000115738	inhibitor of DNA binding 2 Source HGNC Symbol Acc HGNC 5361
D03	UPFH0056186	ENST00000374561.6	ID3	ENSG00000117318	inhibitor of DNA binding 3, HLH protein Source HGNC Symbol Acc HGNC 5362
D04	UPFH1132962	ENST00000621379.4	IFRD1	ENSG00000006652	interferon related developmental regulator 1 Source HGNC Symbol Acc HGNC 5456
D05	UPFH0028177	ENST00000423557.1	IL10	ENSG00000136634	interleukin 10 Source HGNC Symbol Acc HGNC 5962
D06	UPFH0526732	ENST00000395884.3	KLF10	ENSG00000155090	Kruppel like factor 10 Source HGNC Symbol Acc HGNC 11810
D07	UPFH0381277	ENST00000369327.7	MAP3K7	ENSG00000135341	mitogen-activated protein kinase kinase kinase 7 Source HGNC Symbol Acc HGNC 6859
D08	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
D09	UPFH1132535	ENST00000374179.8	MAPK8	ENSG00000107643	mitogen-activated protein kinase 8 Source HGNC Symbol Acc HGNC 6881
D10	UPFH1154130	ENST00000587605.5	MBD1	ENSG00000141644	methyl-CpG binding domain protein 1 Source HGNC Symbol Acc HGNC 6916
D11	UPFH1132551	ENST00000437642.6	MMP2	ENSG00000087245	matrix metallopeptidase 2 Source HGNC Symbol Acc HGNC 7166
D12	UPFH0206778	ENST00000239243.7	MSX2	ENSG00000120149	msh homeobox 2 Source HGNC Symbol Acc HGNC 7392
E01	UPFH1132563	ENST00000517291.1	MYC	ENSG00000136997	MYC proto-oncogene, bHLH transcription factor Source HGNC Symbol Acc HGNC 7553
E02	UPFH0179986	ENST00000250003.4	MYOD1	ENSG00000129152	myogenic differentiation 1 Source HGNC Symbol Acc HGNC 7611
E03	UPFH0281332	ENST00000637742.1	NFIB	ENSG00000147862	nuclear factor I B Source HGNC Symbol Acc HGNC 7785
E04	UPFH0444462	ENST00000216797.9	NFKBIA	ENSG00000100906	NFKB inhibitor alpha Source HGNC Symbol Acc HGNC 7797
E05	UPFH0543837	ENST00000277541.7	NOTCH1	ENSG00000148400	notch 1 Source HGNC Symbol Acc HGNC 7881
E06	UPFH1132608	ENST00000354513.9	PDGFA	ENSG00000197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
E07	UPFH0091404	ENST00000308192.13	PLG	ENSG00000122194	plasminogen Source HGNC Symbol Acc HGNC 9071
E08	UPFH0327373	ENST00000262735.9	PPARA	ENSG00000186951	peroxisome proliferator activated receptor alpha Source HGNC Symbol Acc HGNC 9232
E09	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
E10	UPFH0588389	ENST00000538310.1	PTHLH	ENSG00000087494	parathyroid hormone like hormone Source HGNC Symbol Acc HGNC 9607
E11	UPFH1132643	ENST00000522684.5	PTK2	ENSG00000169398	protein tyrosine kinase 2 Source HGNC Symbol Acc HGNC 9611
E12	UPFH0298721	ENST00000519512.5	PTK2B	ENSG00000120899	protein tyrosine kinase 2 beta Source HGNC Symbol Acc HGNC 9612
F01	UPFH0450827	ENST00000297338.6	RAD21	ENSG00000164754	RAD21 cohesin complex component Source HGNC Symbol Acc HGNC 9811
F02	UPFH0431278	ENST00000394081.7	RARA	ENSG00000131759	retinoic acid receptor alpha Source HGNC Symbol Acc HGNC 9864
F03	UPFH0109902	ENST00000373664.7	RBL1	ENSG00000080839	RB transcriptional corepressor like 1 Source HGNC Symbol Acc HGNC 9893
F04	UPFH1132657	ENST00000445425.4	RHOA	ENSG00000067560	ras homolog family member A Source HGNC Symbol Acc HGNC 667
F05	UPFH0026449	ENST00000272233.5	RHOB	ENSG00000143878	ras homolog family member B Source HGNC Symbol Acc HGNC 668
F06	UPFH0023287	ENST00000437180.5	RUNX1	ENSG00000159216	runt related transcription factor 1 Source HGNC Symbol Acc HGNC 10471
F07	UPFH0497286	ENST00000477973.3	RYBP	ENSG00000163602	RING1 and YY1 binding protein Source HGNC Symbol Acc HGNC 10480
F08	UPFH0240332	ENST00000368732.5	S100A8	ENSG00000143546	S100 calcium binding protein A8 Source HGNC Symbol Acc HGNC 10498
F09	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F10	UPFH0252724	ENST00000430104.5	SHH	ENSG00000164690	sonic hedgehog signaling molecule Source HGNC Symbol Acc HGNC 10848

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132685	ENST00000515385.1	SMAD1	ENSG00000170365	SMAD family member 1 Source HGNC Symbol Acc HGNC 6767
F12	UPFH1132840	ENST00000439724.7	SMAD3	ENSG00000166949	SMAD family member 3 Source HGNC Symbol Acc HGNC 6769
G01	UPFH1132687	ENST00000509297.6	SMAD5	ENSG00000113658	SMAD family member 5 Source HGNC Symbol Acc HGNC 6771
G02	UPFH1132688	ENST00000288840.10	SMAD6	ENSG00000137834	SMAD family member 6 Source HGNC Symbol Acc HGNC 6772
G03	UPFH1132841	ENST00000244050.3	SNAI1	ENSG00000124216	snail family transcriptional repressor 1 Source HGNC Symbol Acc HGNC 11128
G04	UPFH0188647	ENST00000244745.3	SOX4	ENSG00000124766	SRY-box 4 Source HGNC Symbol Acc HGNC 11200
G05	UPFH1132843	ENST00000327443.9	SP1	ENSG00000185591	Sp1 transcription factor Source HGNC Symbol Acc HGNC 11205
G06	UPFH0366862	ENST00000462539.1	SREBF2	ENSG00000198911	sterol regulatory element binding transcription factor 2 Source HGNC Symbol Acc HGNC 11290
G07	UPFH1132846	ENST00000366929.4	TGFB2	ENSG00000092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768
G08	UPFH0249772	ENST00000295754.9	TGFBR2	ENSG00000163513	transforming growth factor beta receptor 2 Source HGNC Symbol Acc HGNC 11773
G09	UPFH1132847	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G10	UPFH1132733	ENST00000241261.7	TNFSF10	ENSG00000121858	TNF superfamily member 10 Source HGNC Symbol Acc HGNC 11925
G11	UPFH0343233	ENST00000582401.5	TXNIP	ENSG00000265972	thioredoxin interacting protein Source HGNC Symbol Acc HGNC 16952
G12	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
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 µl reactions: 20 µl 8x gDNA Removal Mix, 10 µl Reverse Transcription Enzyme, 40 µl Reverse Transcription Mix (containing RT primers), 20 µl Internal Control RNA, 1.9 ml RNase-Free Water	205410
QuantiNova Probe RT-PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml QuantiNova Probe RT-PCR Master Mix, 20 µl QuantiNova Probe RT Mix, 20 µl Internal Control RNA, 500 µl Yellow Template Dilution Buffer, 250 µl ROX Reference Dye, 1.9 µl RNase-Free Water	208352
QuantiNova Probe PCR Kit (100)*	For 100 x 20 µl reactions: 1 ml 2x QuantiNova Probe PCR Master Mix, 500 µl QuantiNova Yellow Template Dilution Buffer, 250 µl 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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