

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

## Human Angiogenesis

Cat. no. 249955 UPHS-024ZR

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	AKT1	ANG	ANGPT1	ANGPT2	ANGPTL4	ANPEP	ADGRB1	CCL11	CCL2	CDH5	COL18A1	COL4A3
B	CCN2	CXCL1	CXCL10	CXCL5	CXCL6	CXCL9	EDN1	EFNA1	EFNB2	EGF	ENG	EPHB4
C	ERBB2	F3	FGF1	FGF2	FGFR3	VEGFD	FLT1	FN1	HGF	HIF1A	HPSE	ID1
D	IFNA1	IFNG	IGF1	IL1B	IL6	CXCL8	ITGAV	ITGB3	JAG1	KDR	CNMD	LEP
E	MDK	MMP14	MMP2	MMP9	NOS3	NOTCH4	NRP1	NRP2	PDGFA	PECAM1	PF4	PGF
F	PLAU	PLG	PROK2	PTGS1	S1PR1	SERPINE1	SERPINF1	SPHK1	TEK	TGFA	TGFB1	TGFB2
G	TGFB1	THBS1	THBS2	TIE1	TIMP1	TIMP2	TIMP3	TNF	TYMP	VEGFA	VEGFB	VEGFC
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	UPFH0453992	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A02	UPFH0091321	ENST00000336811.10	ANG	ENSG00000214274	angiogenin Source HGNC Symbol Acc HGNC 483
A03	UPFH1132231	ENST00000517746.6	ANGPT1	ENSG00000154188	angiopoietin 1 Source HGNC Symbol Acc HGNC 484
A04	UPFH0272158	ENST00000325203.9	ANGPT2	ENSG00000091879	angiopoietin 2 Source HGNC Symbol Acc HGNC 485
A05	UPFH1132232	ENST00000301455.7	ANGPTL4	ENSG00000167772	angiopoietin like 4 Source HGNC Symbol Acc HGNC 16039
A06	UPFH1132234	ENST00000300060.7	ANPEP	ENSG00000166825	alanyl aminopeptidase, membrane Source HGNC Symbol Acc HGNC 500
A07	UPFH0051538	ENST00000323289.6	ADGRB1	ENSG00000181790	adhesion G protein-coupled receptor B1 Source HGNC Symbol Acc HGNC 943
A08	UPFH0201571	ENST00000305869.3	CCL11	ENSG00000172156	C-C motif chemokine ligand 11 Source HGNC Symbol Acc HGNC 10610
A09	UPFH1132783	ENST00000225831.4	CCL2	ENSG00000108691	C-C motif chemokine ligand 2 Source HGNC Symbol Acc HGNC 10618
A10	UPFH1132306	ENST00000563425.2	CDH5	ENSG00000179776	cadherin 5 Source HGNC Symbol Acc HGNC 1764
A11	UPFH1132325	ENST00000359759.8	COL18A1	ENSG00000182871	collagen type XVIII alpha 1 chain Source HGNC Symbol Acc HGNC 2195
A12	UPFH0194470	ENST00000487633.1	COL4A3	ENSG00000169031	collagen type IV alpha 3 chain Source HGNC Symbol Acc HGNC 2204
B01	UPFH1132340	ENST00000367976.4	CCN2	ENSG00000118523	cellular communication network factor 2 Source HGNC Symbol Acc HGNC 2500
B02	UPFH0494346	ENST00000395761.3	CXCL1	ENSG00000163739	C-X-C motif chemokine ligand 1 Source HGNC Symbol Acc HGNC 4602
B03	UPFH0196315	ENST00000306602.3	CXCL10	ENSG00000169245	C-X-C motif chemokine ligand 10 Source HGNC Symbol Acc HGNC 10637
B04	UPFH1132798	ENST00000296027.5	CXCL5	ENSG00000163735	C-X-C motif chemokine ligand 5 Source HGNC Symbol Acc HGNC 10642
B05	UPFH1132350	ENST00000226317.10	CXCL6	ENSG00000124875	C-X-C motif chemokine ligand 6 Source HGNC Symbol Acc HGNC 10643
B06	UPFH0222764	ENST00000264888.5	CXCL9	ENSG00000138755	C-X-C motif chemokine ligand 9 Source HGNC Symbol Acc HGNC 7098
B07	UPFH1132801	ENST00000379375.6	EDN1	ENSG00000078401	endothelin 1 Source HGNC Symbol Acc HGNC 3176
B08	UPFH0161033	ENST00000368406.2	EFNA1	ENSG00000169242	ephrin A1 Source HGNC Symbol Acc HGNC 3221
B09	UPFH0607546	ENST00000245323.4	EFNB2	ENSG00000125266	ephrin B2 Source HGNC Symbol Acc HGNC 3227
B10	UPFH1132380	ENST00000503392.1	EGF	ENSG00000138798	epidermal growth factor Source HGNC Symbol Acc HGNC 3229
B11	UPFH0535657	ENST00000344849.4	ENG	ENSG00000106991	endoglin Source HGNC Symbol Acc HGNC 3349
B12	UPFH1132386	ENST00000360620.7	EPHB4	ENSG00000196411	EPH receptor B4 Source HGNC Symbol Acc HGNC 3395
C01	UPFH1132388	ENST00000541774.5	ERBB2	ENSG00000141736	erb-b2 receptor tyrosine kinase 2 Source HGNC Symbol Acc HGNC 3430
C02	UPFH1132393	ENST00000334047.12	F3	ENSG00000117525	coagulation factor III, tissue factor Source HGNC Symbol Acc HGNC 3541
C03	UPFH0087975	ENST00000612258.4	FGF1	ENSG00000113578	fibroblast growth factor 1 Source HGNC Symbol Acc HGNC 3665
C04	UPFH0613093	ENST00000264498.7	FGF2	ENSG00000138685	fibroblast growth factor 2 Source HGNC Symbol Acc HGNC 3676
C05	UPFH0584716	ENST00000440486.7	FGFR3	ENSG00000068078	fibroblast growth factor receptor 3 Source HGNC Symbol Acc HGNC 3690
C06	UPFH1132399	ENST00000297904.4	VEGFD	ENSG00000165197	vascular endothelial growth factor D Source HGNC Symbol Acc HGNC 3708
C07	UPFH1132400	ENST00000541932.5	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
C08	UPFH0605066	ENST00000336916.8	FN1	ENSG00000115414	fibronectin 1 Source HGNC Symbol Acc HGNC 3778
C09	UPFH1132871	ENST00000643024.1	HGF	ENSG00000019991	hepatocyte growth factor Source HGNC Symbol Acc HGNC 4893
C10	UPFH1132447	ENST00000394997.5	HIF1A	ENSG00000100644	hypoxia inducible factor 1 subunit alpha Source HGNC Symbol Acc HGNC 4910
		ENST00000512		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH1132454	196.5	HPSE	173083	heparanase Source HGNC Symbol Acc HGNC 5164
C12	UPFH1132463	ENST00000376112.4	ID1	ENSG00000125968	inhibitor of DNA binding 1, HLH protein Source HGNC Symbol Acc HGNC 5360
D01	UPFH0577805	ENST00000276927.2	IFNA1	ENSG00000197919	interferon alpha 1 Source HGNC Symbol Acc HGNC 5417
D02	UPFH1132473	ENST00000229135.4	IFNG	ENSG00000111537	interferon gamma Source HGNC Symbol Acc HGNC 5438
D03	UPFH0229443	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D04	UPFH0163764	ENST00000263341.6	IL1B	ENSG00000125538	interleukin 1 beta Source HGNC Symbol Acc HGNC 5992
D05	UPFH1172910	ENST00000258743.10	IL6	ENSG00000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D06	UPFH0120553	ENST00000307407.8	CXCL8	ENSG00000169429	C-X-C motif chemokine ligand 8 Source HGNC Symbol Acc HGNC 6025
D07	UPFH1132816	ENST00000261023.8	ITGAV	ENSG00000138448	integrin subunit alpha V Source HGNC Symbol Acc HGNC 6150
D08	UPFH1132500	ENST00000559488.5	ITGB3	ENSG00000259207	integrin subunit beta 3 Source HGNC Symbol Acc HGNC 6156
D09	UPFH0500277	ENST00000254958.10	JAG1	ENSG00000101384	jagged 1 Source HGNC Symbol Acc HGNC 6188
D10	UPFH0596732	ENST00000263923.5	KDR	ENSG00000128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
D11	UPFH1132912	ENST00000377962.8	CNMD	ENSG00000136110	chondromodulin Source HGNC Symbol Acc HGNC 17005
D12	UPFH1132519	ENST00000308868.5	LEP	ENSG00000174697	leptin Source HGNC Symbol Acc HGNC 6553
E01	UPFH0255721	ENST00000395566.8	MDK	ENSG00000110492	midkine Source HGNC Symbol Acc HGNC 6972
E02	UPFH1132973	ENST00000311852.11	MMP14	ENSG00000157227	matrix metalloproteinase 14 Source HGNC Symbol Acc HGNC 7160
E03	UPFH1132551	ENST00000437642.6	MMP2	ENSG00000087245	matrix metalloproteinase 2 Source HGNC Symbol Acc HGNC 7166
E04	UPFH0367626	ENST00000372330.3	MMP9	ENSG00000100985	matrix metalloproteinase 9 Source HGNC Symbol Acc HGNC 7176
E05	UPFH1132897	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
E06	UPFH1132594	ENST00000375023.3	NOTCH4	ENSG00000204301	notch 4 Source HGNC Symbol Acc HGNC 7884
E07	UPFH1132598	ENST00000395995.5	NRP1	ENSG00000099250	neuropilin 1 Source HGNC Symbol Acc HGNC 8004
E08	UPFH1132599	ENST00000412873.2	NRP2	ENSG00000118257	neuropilin 2 Source HGNC Symbol Acc HGNC 8005
E09	UPFH1132608	ENST00000354513.9	PDGFA	ENSG00000197461	platelet derived growth factor subunit A Source HGNC Symbol Acc HGNC 8799
E10	UPFH1132613	ENST00000563924.6	PECAM1	ENSG00000261371	platelet and endothelial cell adhesion molecule 1 Source HGNC Symbol Acc HGNC 8823
E11	UPFH0614943	ENST00000296029.3	PF4	ENSG00000163737	platelet factor 4 Source HGNC Symbol Acc HGNC 8861
E12	UPFH1132616	ENST00000555567.6	PGF	ENSG00000119630	placental growth factor Source HGNC Symbol Acc HGNC 8893
F01	UPFH1132831	ENST00000446342.5	PLAU	ENSG00000122861	plasminogen activator, urokinase Source HGNC Symbol Acc HGNC 9052
F02	UPFH0091404	ENST00000308192.13	PLG	ENSG00000122194	plasminogen Source HGNC Symbol Acc HGNC 9071
F03	UPFH0318194	ENST00000353065.7	PROK2	ENSG00000163421	prokineticin 2 Source HGNC Symbol Acc HGNC 18455
F04	UPFH0450481	ENST00000619306.5	PTGS1	ENSG00000095303	prostaglandin-endoperoxide synthase 1 Source HGNC Symbol Acc HGNC 9604
F05	UPFH0376099	ENST00000305352.6	S1PR1	ENSG00000170989	sphingosine-1-phosphate receptor 1 Source HGNC Symbol Acc HGNC 3165
F06	UPFH0384736	ENST00000223095.4	SERPINE1	ENSG00000106366	serpin family E member 1 Source HGNC Symbol Acc HGNC 8583
F07	UPFH1172913	ENST00000254722.9	SERPINF1	ENSG00000132386	serpin family F member 1 Source HGNC Symbol Acc HGNC 8824
F08	UPFH0560569	ENST00000590959.5	SPHK1	ENSG00000176170	sphingosine kinase 1 Source NCBI gene Acc 8877
F09	UPFH1132711	ENST00000380036.9	TEK	ENSG00000120156	TEK receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11724
F10	UPFH1132717	ENST00000295400.11	TGFA	ENSG00000163235	transforming growth factor alpha Source HGNC Symbol Acc HGNC 11765

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0193430	ENST00000221930.5	TGFB1	ENSG00000105329	transforming growth factor beta 1 Source NCBI gene Acc 7040
F12	UPFH1132846	ENST00000366929.4	TGFB2	ENSG00000092969	transforming growth factor beta 2 Source HGNC Symbol Acc HGNC 11768
G01	UPFH1132719	ENST00000374990.6	TGFBR1	ENSG00000106799	transforming growth factor beta receptor 1 Source HGNC Symbol Acc HGNC 11772
G02	UPFH1132847	ENST00000260356.5	THBS1	ENSG00000137801	thrombospondin 1 Source HGNC Symbol Acc HGNC 11785
G03	UPFH1125960	ENST00000366787.7	THBS2	ENSG00000186340	thrombospondin 2 Source HGNC Symbol Acc HGNC 11786
G04	UPFH0392212	ENST00000538015.1	TIE1	ENSG00000066056	tyrosine kinase with immunoglobulin like and EGF like domains 1 Source HGNC Symbol Acc HGNC 11809
G05	UPFH1132725	ENST00000456754.6	TIMP1	ENSG00000102265	TIMP metalloproteinase inhibitor 1 Source HGNC Symbol Acc HGNC 11820
G06	UPFH0276014	ENST00000262768.11	TIMP2	ENSG00000035862	TIMP metalloproteinase inhibitor 2 Source HGNC Symbol Acc HGNC 11821
G07	UPFH0118826	ENST00000266085.6	TIMP3	ENSG00000100234	TIMP metalloproteinase inhibitor 3 Source HGNC Symbol Acc HGNC 11822
G08	UPFH1132978	ENST00000449264.3	TNF	ENSG00000232810	tumor necrosis factor Source HGNC Symbol Acc HGNC 11892
G09	UPFH1132746	ENST00000252029.8	TYMP	ENSG00000025708	thymidine phosphorylase Source HGNC Symbol Acc HGNC 3148
G10	UPFH0281656	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G11	UPFH0523097	ENST00000309422.6	VEGFB	ENSG00000173511	vascular endothelial growth factor B Source HGNC Symbol Acc HGNC 12681
G12	UPFH1132755	ENST00000618562.2	VEGFC	ENSG00000150630	vascular endothelial growth factor C Source HGNC Symbol Acc HGNC 12682
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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