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

Human VEGF Signaling

Cat. no. 249955 UPHS-091ZR

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** for further details.

	1	2	3	4	5	6	7	8	9	10	11	12
A	AKT1	AKT2	AKT3	ARNT	BAD	CASP9	CAV1	CDC42	VEGFD	FLT1	FLT4	GRB2
B	HIF1A	HRAS	HSP90AA1	HSPB1	KDR	KRAS	MAP2K1	MAP2K2	MAPK1	MAPK11	MAPK12	MAPK13
C	MAPK14	MAPK3	MAPKAPK2	MAPKAPK3	NFAT5	NFATC1	NFATC2	NFATC3	NFATC4	NOS3	NRAS	NRP1
D	NRP2	PDGFC	PGF	PIK3CA	PIK3CB	PIK3CD	PIK3CG	PIK3R1	PIK3R2	PIK3R3	PIK3R5	PLA2G10
E	PLA2G12A	PLA2G12B	PLA2G1B	PLA2G2A	PLA2G2D	PLA2G2E	PLA2G2F	PLA2G3	PLA2G4A	PLA2G4B	PLA2G5	PLA2G6
F	PLCG1	PLCG2	PPP3CA	PPP3CB	PPP3CC	PPP3R1	PPP3R2	PRKCA	PRKCB	PRKCG	PTGS2	PTK2
G	PXN	RAC1	RAC2	RAF1	SH2D2A	SHC2	SPHK1	SPHK2	SRC	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	UPFH0246744	ENST00000441941.6	AKT2	ENSG00000105221	AKT serine/threonine kinase 2 Source HGNC Symbol Acc HGNC 392
A03	UPFH0198803	ENST00000336199.9	AKT3	ENSG00000117020	AKT serine/threonine kinase 3 Source HGNC Symbol Acc HGNC 393
A04	UPFH1132241	ENST00000354396.6	ARNT	ENSG00000143437	aryl hydrocarbon receptor nuclear translocator Source HGNC Symbol Acc HGNC 700
A05	UPFH0437748	ENST00000394532.7	BAD	ENSG00000002330	BCL2 associated agonist of cell death Source HGNC Symbol Acc HGNC 936
A06	UPFH0083593	ENST00000440484.1	CASP9	ENSG00000132906	caspase 9 Source HGNC Symbol Acc HGNC 1511
A07	UPFH0192343	ENST00000393468.1	CAV1	ENSG00000105974	caveolin 1 Source HGNC Symbol Acc HGNC 1527
A08	UPFH0571108	ENST00000400259.5	CDC42	ENSG00000070831	cell division cycle 42 Source HGNC Symbol Acc HGNC 1736
A09	UPFH1132399	ENST00000297904.4	VEGFD	ENSG00000165197	vascular endothelial growth factor D Source HGNC Symbol Acc HGNC 3708
A10	UPFH1132400	ENST00000541932.5	FLT1	ENSG00000102755	fms related tyrosine kinase 1 Source HGNC Symbol Acc HGNC 3763
A11	UPFH0098802	ENST00000514810.1	FLT4	ENSG00000037280	fms related tyrosine kinase 4 Source HGNC Symbol Acc HGNC 3767
A12	UPFH1132426	ENST00000392564.5	GRB2	ENSG00000177885	growth factor receptor bound protein 2 Source HGNC Symbol Acc HGNC 4566
B01	UPFH1132447	ENST00000394997.5	HIF1A	ENSG00000100644	hypoxia inducible factor 1 subunit alpha Source HGNC Symbol Acc HGNC 4910
B02	UPFH1132981	ENST00000311189.8	HRAS	ENSG00000174775	HRas proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 5173
B03	UPFH0292880	ENST00000334701.11	HSP90AA1	ENSG00000080824	heat shock protein 90 alpha family class A member 1 Source HGNC Symbol Acc HGNC 5253
B04	UPFH1139042	ENST00000248553.7	HSPB1	ENSG00000106211	heat shock protein family B (small) member 1 Source HGNC Symbol Acc HGNC 5246
B05	UPFH0596732	ENST00000263923.5	KDR	ENSG00000128052	kinase insert domain receptor Source HGNC Symbol Acc HGNC 6307
B06	UPFH0376060	ENST00000557334.5	KRAS	ENSG00000133703	KRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 6407
B07	UPFH1132932	ENST00000307102.9	MAP2K1	ENSG00000169032	mitogen-activated protein kinase kinase 1 Source HGNC Symbol Acc HGNC 6840
B08	UPFH0606297	ENST00000599021.1	MAP2K2	ENSG00000126934	mitogen-activated protein kinase kinase 2 Source HGNC Symbol Acc HGNC 6842
B09	UPFH0366815	ENST00000215832.10	MAPK1	ENSG00000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
B10	UPFH0233655	ENST00000417877.1	MAPK11	ENSG00000185386	mitogen-activated protein kinase 11 Source HGNC Symbol Acc HGNC 6873
B11	UPFH1132533	ENST00000395778.3	MAPK12	ENSG00000188130	mitogen-activated protein kinase 12 Source HGNC Symbol Acc HGNC 6874
B12	UPFH0194573	ENST00000373759.1	MAPK13	ENSG00000156711	mitogen-activated protein kinase 13 Source HGNC Symbol Acc HGNC 6875
C01	UPFH0068247	ENST00000229795.7	MAPK14	ENSG00000112062	mitogen-activated protein kinase 14 Source HGNC Symbol Acc HGNC 6876
C02	UPFH1132534	ENST00000481230.1	MAPK3	ENSG00000102882	mitogen-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6877
C03	UPFH0398763	ENST00000294981.8	MAPKAPK2	ENSG00000162889	mitogen-activated protein kinase-activated protein kinase 2 Source HGNC Symbol Acc HGNC 6887
C04	UPFH0036060	ENST00000621469.5	MAPKAPK3	ENSG00000114738	mitogen-activated protein kinase-activated protein kinase 3 Source HGNC Symbol Acc HGNC 6888
C05	UPFH0317172	ENST00000354436.6	NFAT5	ENSG00000102908	nuclear factor of activated T cells 5 Source HGNC Symbol Acc HGNC 7774
C06	UPFH0595445	ENST00000591814.5	NFATC1	ENSG00000131196	nuclear factor of activated T cells 1 Source HGNC Symbol Acc HGNC 7775
C07	UPFH0101128	ENST00000610033.5	NFATC2	ENSG00000101096	nuclear factor of activated T cells 2 Source HGNC Symbol Acc HGNC 7776
C08	UPFH0123113	ENST00000562926.5	NFATC3	ENSG00000072736	nuclear factor of activated T cells 3 Source HGNC Symbol Acc HGNC 7777
C09	UPFH0189206	ENST00000553879.5	NFATC4	ENSG00000100968	nuclear factor of activated T cells 4 Source HGNC Symbol Acc HGNC 7778
C10	UPFH1132897	ENST00000297494.8	NOS3	ENSG00000164867	nitric oxide synthase 3 Source HGNC Symbol Acc HGNC 7876
		ENST00000369		ENSG00000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0189023	535.5	NRAS	213281	NRAS proto-oncogene, GTPase Source HGNC Symbol Acc HGNC 7989
C12	UPFH1132598	ENST00000395995.5	NRP1	ENSG00000099250	neuropilin 1 Source HGNC Symbol Acc HGNC 8004
D01	UPFH1132599	ENST00000412873.2	NRP2	ENSG00000118257	neuropilin 2 Source HGNC Symbol Acc HGNC 8005
D02	UPFH0529678	ENST00000510982.5	PDGFC	ENSG00000145431	platelet derived growth factor C Source HGNC Symbol Acc HGNC 8801
D03	UPFH1132616	ENST00000555567.6	PGF	ENSG00000119630	placental growth factor Source HGNC Symbol Acc HGNC 8893
D04	UPFH0109251	ENST00000462255.1	PIK3CA	ENSG00000121879	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha Source HGNC Symbol Acc HGNC 8975
D05	UPFH0355077	ENST00000469284.6	PIK3CB	ENSG00000051382	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta Source HGNC Symbol Acc HGNC 8976
D06	UPFH0157436	ENST00000361110.6	PIK3CD	ENSG00000171608	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta Source HGNC Symbol Acc HGNC 8977
D07	UPFH0562261	ENST00000473541.5	PIK3CG	ENSG00000105851	phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma Source HGNC Symbol Acc HGNC 8978
D08	UPFH0549122	ENST00000521381.6	PIK3R1	ENSG00000145675	phosphoinositide-3-kinase regulatory subunit 1 Source HGNC Symbol Acc HGNC 8979
D09	UPFH0463753	ENST00000617130.4	PIK3R2	ENSG00000105647	phosphoinositide-3-kinase regulatory subunit 2 Source HGNC Symbol Acc HGNC 8980
D10	UPFH0403932	ENST00000372006.5	PIK3R3	ENSG00000117461	phosphoinositide-3-kinase regulatory subunit 3 Source HGNC Symbol Acc HGNC 8981
D11	UPFH0443388	ENST00000578457.5	PIK3R5	ENSG00000141506	phosphoinositide-3-kinase regulatory subunit 5 Source HGNC Symbol Acc HGNC 30035
D12	UPFH0164992	ENST00000438167.7	PLA2G10	ENSG00000069764	phospholipase A2 group X Source HGNC Symbol Acc HGNC 9029
E01	UPFH0512596	ENST00000507961.1	PLA2G12A	ENSG00000123739	phospholipase A2 group XIIA Source HGNC Symbol Acc HGNC 18554
E02	UPFH0051369	ENST00000373032.3	PLA2G12B	ENSG00000138308	phospholipase A2 group XIIB Source HGNC Symbol Acc HGNC 18555
E03	UPFH0561862	ENST00000308366.9	PLA2G1B	ENSG00000170890	phospholipase A2 group IB Source HGNC Symbol Acc HGNC 9030
E04	UPFH0479622	ENST00000496748.1	PLA2G2A	ENSG00000188257	phospholipase A2 group IIA Source HGNC Symbol Acc HGNC 9031
E05	UPFH0058830	ENST00000375105.7	PLA2G2D	ENSG00000117215	phospholipase A2 group IID Source HGNC Symbol Acc HGNC 9033
E06	UPFH0340758	ENST00000375116.3	PLA2G2E	ENSG00000188784	phospholipase A2 group IIE Source HGNC Symbol Acc HGNC 13414
E07	UPFH0326214	ENST00000375102.3	PLA2G2F	ENSG00000158786	phospholipase A2 group IIF Source HGNC Symbol Acc HGNC 30040
E08	UPFH0303357	ENST00000215885.4	PLA2G3	ENSG00000100078	phospholipase A2 group III Source HGNC Symbol Acc HGNC 17934
E09	UPFH0464083	ENST00000466600.1	PLA2G4A	ENSG00000116711	phospholipase A2 group IVA Source HGNC Symbol Acc HGNC 9035
E10	UPFH0367357	ENST00000461382.5	PLA2G4B	ENSG00000243708	phospholipase A2 group IVB Source HGNC Symbol Acc HGNC 9036
E11	UPFH0430356	ENST00000375108.4	PLA2G5	ENSG00000127472	phospholipase A2 group V Source HGNC Symbol Acc HGNC 9038
E12	UPFH0217290	ENST00000335539.7	PLA2G6	ENSG00000184381	phospholipase A2 group VI Source HGNC Symbol Acc HGNC 9039
F01	UPFH0088354	ENST00000617873.4	PLCG1	ENSG00000124181	phospholipase C gamma 1 Source HGNC Symbol Acc HGNC 9065
F02	UPFH0213401	ENST00000359376.7	PLCG2	ENSG00000197943	phospholipase C gamma 2 Source HGNC Symbol Acc HGNC 9066
F03	UPFH0410648	ENST00000394854.8	PPP3CA	ENSG00000138814	protein phosphatase 3 catalytic subunit alpha Source HGNC Symbol Acc HGNC 9314
F04	UPFH0334097	ENST00000360663.9	PPP3CB	ENSG00000107758	protein phosphatase 3 catalytic subunit beta Source HGNC Symbol Acc HGNC 9315
F05	UPFH0362085	ENST00000523620.1	PPP3CC	ENSG00000120910	protein phosphatase 3 catalytic subunit gamma Source HGNC Symbol Acc HGNC 9316
F06	UPFH0349064	ENST00000409377.1	PPP3R1	ENSG00000221823	protein phosphatase 3 regulatory subunit B, alpha Source HGNC Symbol Acc HGNC 9317
F07	UPFH0397290	ENST00000636434.1	PPP3R2	ENSG00000188386	protein phosphatase 3 regulatory subunit B, beta Source HGNC Symbol Acc HGNC 9318
F08	UPFH0607768	ENST00000578063.5	PRKCA	ENSG00000154229	protein kinase C alpha Source HGNC Symbol Acc HGNC 9393
F09	UPFH0529104	ENST00000646168.1	PRKCB	ENSG00000166501	protein kinase C beta Source HGNC Symbol Acc HGNC 9395
F10	UPFH0047967	ENST00000474397.5	PRKCG	ENSG00000126583	protein kinase C gamma Source HGNC Symbol Acc HGNC 9402

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH1132642	ENST00000367468.10	PTGS2	ENSG00000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F12	UPFH1132643	ENST00000522684.5	PTK2	ENSG00000169398	protein tyrosine kinase 2 Source HGNC Symbol Acc HGNC 9611
G01	UPFH0358908	ENST00000547983.5	PXN	ENSG00000089159	paxillin Source HGNC Symbol Acc HGNC 9718
G02	UPFH1132648	ENST00000348035.9	RAC1	ENSG00000136238	Rac family small GTPase 1 Source HGNC Symbol Acc HGNC 9801
G03	UPFH0283088	ENST00000249071.11	RAC2	ENSG00000128340	Rac family small GTPase 2 Source HGNC Symbol Acc HGNC 9802
G04	UPFH0380839	ENST00000416093.1	RAF1	ENSG00000132155	Raf-1 proto-oncogene, serine/threonine kinase Source HGNC Symbol Acc HGNC 9829
G05	UPFH0144173	ENST00000468744.5	SH2D2A	ENSG00000027869	SH2 domain containing 2A Source HGNC Symbol Acc HGNC 10821
G06	UPFH0259006	ENST00000590222.5	SHC2	ENSG00000129946	SHC adaptor protein 2 Source HGNC Symbol Acc HGNC 29869
G07	UPFH0560569	ENST00000590959.5	SPHK1	ENSG00000176170	sphingosine kinase 1 Source NCBI gene Acc 8877
G08	UPFH0099327	ENST00000597434.5	SPHK2	ENSG00000063176	sphingosine kinase 2 Source HGNC Symbol Acc HGNC 18859
G09	UPFH0308412	ENST00000472968.1	SRC	ENSG00000197122	SRC proto-oncogene, non-receptor tyrosine kinase Source HGNC Symbol Acc HGNC 11283
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 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.

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 or can be requested from QIAGEN Technical Services or your local distributor.