

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

## Human Prostate Cancer

Cat. no. 249950 SBHS-135ZR

For study focus gene expression analysis

### Shipping and storage

QuantiNova LNA PCR Focus Panels are shipped at ambient temperature. Immediately upon receipt, they should be stored 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 PCR Focus Panels should be used together with the QuantiNova Reverse Transcription Kit for cDNA synthesis and the QuantiNova SYBR® Green PCR Kit (Mastermix) for PCR.

### Panel layout (Rotor-Gene): QuantiNova LNA 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 PCR System 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	ACACA	AKT1	APC	AR	ARNTL	BCL2	CAMKK1	CAMSAP1	CASP3	CAV1	CAV2	CCNA1
B	CCND1	CCND2	CDH1	CDKN2A	CLN3	CREB1	DAXX	DDX11	DKK3	DLC1	ECT2	EDNRB
C	EGFR	EGR3	ERG	ETV1	FASN	FOXO1	GCA	GNRH1	GPX3	GSTP1	HAL	HMGCR
D	IGF1	IGFBP5	IL6	KLHL13	KLK3	LGALS4	LOXL1	MAPK1	MAX	MGMT	MKI67	MSX1
E	MTO1	NDRG3	NFKB1	NKX3-1	NRIP1	PDLIM4	PDPK1	PES1	PPP2R1B	PRKAB1	PTEN	PTGS1
F	PTGS2	RARB	RASSF1	RBM39	SCAF11	SEPT7	SFRP1	SHBG	SILCSA8	SOCS3	SOX4	SREBF1
G	STK11	SUPT7L	TFPI2	TGFB111	TIMP2	TIMP3	TMPRSS2	TNFRSF10D	TP53	USP5	VEGFA	ZNF185
H	ACTB	B2M	GAPDH	HPRT1	RPLP0	HGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBH0228804	ENST00000617649.4	ACACA	ENSG00000278540	acetyl-CoA carboxylase alpha Source HGNC Symbol Acc HGNC 84
A02	SBH0095396	ENST00000555528.5	AKT1	ENSG00000142208	AKT serine/threonine kinase 1 Source HGNC Symbol Acc HGNC 391
A03	SBH1219746	ENST00000512211.6	APC	ENSG00000134982	APC, WNT signaling pathway regulator Source HGNC Symbol Acc HGNC 583
A04	SBH0056376	ENST00000374690.8	AR	ENSG00000169083	androgen receptor Source HGNC Symbol Acc HGNC 644
A05	SBH0082062	ENST00000480685.5	ARNTL	ENSG00000133794	aryl hydrocarbon receptor nuclear translocator like Source HGNC Symbol Acc HGNC 701
A06	SBH1219786	ENST00000398117.1	BCL2	ENSG00000171791	BCL2, apoptosis regulator Source HGNC Symbol Acc HGNC 990
A07	SBH0391901	ENST00000348335.6	CAMKK1	ENSG00000004660	calcium/calmodulin dependent protein kinase kinase 1 Source HGNC Symbol Acc HGNC 1469
A08	SBH0260620	ENST00000482664.5	CAMSAP1	ENSG00000130559	calmodulin regulated spectrin associated protein 1 Source HGNC Symbol Acc HGNC 19946
A09	SBH1219824	ENST00000308394.9	CASP3	ENSG00000164305	caspase 3 Source HGNC Symbol Acc HGNC 1504
A10	SBH0105254	ENST00000451122.5	CAV1	ENSG00000105974	caveolin 1 Source HGNC Symbol Acc HGNC 1527
A11	SBH0607858	ENST00000484871.5	CAV2	ENSG00000105971	caveolin 2 Source HGNC Symbol Acc HGNC 1528
A12	SBH0219497	ENST00000440264.5	CCNA1	ENSG00000133101	cyclin A1 Source HGNC Symbol Acc HGNC 1577
B01	SBH0434090	ENST00000227507.2	CCND1	ENSG00000110092	cyclin D1 Source HGNC Symbol Acc HGNC 1582
B02	SBH1219845	ENST00000261254.8	CCND2	ENSG00000118971	cyclin D2 Source HGNC Symbol Acc HGNC 1583
B03	SBH1219869	ENST00000261769.10	CDH1	ENSG00000039068	cadherin 1 Source HGNC Symbol Acc HGNC 1748
B04	SBH0349548	ENST00000304494.9	CDKN2A	ENSG00000147889	cyclin dependent kinase inhibitor 2A Source HGNC Symbol Acc HGNC 1787
B05	SBH0070674	ENST00000359984.12	CLN3	ENSG00000188603	CLN3, battenin Source HGNC Symbol Acc HGNC 2074
B06	SBH0077258	ENST00000353267.8	CREB1	ENSG00000118260	cAMP responsive element binding protein 1 Source HGNC Symbol Acc HGNC 2345
B07	SBH0192205	ENST00000498030.1	DAXX	ENSG00000204209	death domain associated protein Source HGNC Symbol Acc HGNC 2681
B08	SBH0667653	ENST00000435753.6	DDX11	ENSG00000013573	DEAD/H-box helicase 11 Source HGNC Symbol Acc HGNC 2736
B09	SBH0032244	ENST00000396505.6	DKK3	ENSG00000050165	dickkopf WNT signaling pathway inhibitor 3 Source HGNC Symbol Acc HGNC 2893
B10	SBH0650766	ENST00000510318.5	DLC1	ENSG00000164741	DLC1 Rho GTPase activating protein Source HGNC Symbol Acc HGNC 2897
B11	SBH0174226	ENST00000417960.5	ECT2	ENSG00000114346	epithelial cell transforming 2 Source HGNC Symbol Acc HGNC 3155
B12	SBH0590788	ENST00000475537.2	EDNRB	ENSG00000136160	endothelin receptor type B Source HGNC Symbol Acc HGNC 3180
C01	SBH1219970	ENST00000454757.6	EGFR	ENSG00000146648	epidermal growth factor receptor Source HGNC Symbol Acc HGNC 3236
C02	SBH0457320	ENST00000518773.1	EGR3	ENSG00000179388	early growth response 3 Source HGNC Symbol Acc HGNC 3240
C03	SBH0090923	ENST00000398911.5	ERG	ENSG00000157554	ETS transcription factor ERG Source HGNC Symbol Acc HGNC 3446
C04	SBH0083374	ENST00000476720.6	ETV1	ENSG00000006468	ETS variant 1 Source HGNC Symbol Acc HGNC 3490
C05	SBH0282662	ENST00000635197.1	FASN	ENSG00000169710	fatty acid synthase Source HGNC Symbol Acc HGNC 3594
C06	SBH0594989	ENST00000379561.6	FOXO1	ENSG00000150907	forkhead box O1 Source HGNC Symbol Acc HGNC 3819
C07	SBH0092746	ENST00000473240.5	GCA	ENSG00000115271	granulysin Source HGNC Symbol Acc HGNC 15990
C08	SBH0570805	ENST00000421054.7	GNRH1	ENSG00000147437	gonadotropin releasing hormone 1 Source HGNC Symbol Acc HGNC 4419
C09	SBH1220034	ENST00000521650.5	GPX3	ENSG00000211445	glutathione peroxidase 3 Source HGNC Symbol Acc HGNC 4555
C10	SBH1220043	ENST00000642444.1	GSTP1	ENSG00000084207	glutathione S-transferase pi 1 Source HGNC Symbol Acc HGNC 4638
		ENST00000544		ENSG000000	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBH0326532	080.6	HAL	084110	histidine ammonia-lyase Source HGNC Symbol Acc HGNC 4806
C12	SBH0118882	ENST00000511206.5	HMGCR	ENSG00000113161	3-hydroxy-3-methylglutaryl-CoA reductase Source HGNC Symbol Acc HGNC 5006
D01	SBH1220091	ENST00000337514.10	IGF1	ENSG00000017427	insulin like growth factor 1 Source HGNC Symbol Acc HGNC 5464
D02	SBH1220094	ENST00000233813.5	IGFBP5	ENSG000000115461	insulin like growth factor binding protein 5 Source HGNC Symbol Acc HGNC 5474
D03	SBH1220111	ENST00000401630.7	IL6	ENSG000000136244	interleukin 6 Source HGNC Symbol Acc HGNC 6018
D04	SBH0231386	ENST00000545703.5	KLHL13	ENSG000000003096	kelch like family member 13 Source HGNC Symbol Acc HGNC 22931
D05	SBH1220152	ENST00000598145.1	KLK3	ENSG000000142515	kallikrein related peptidase 3 Source HGNC Symbol Acc HGNC 6364
D06	SBH0471750	ENST00000597153.5	LGALS4	ENSG000000171747	galectin 4 Source HGNC Symbol Acc HGNC 6565
D07	SBH0467579	ENST00000566011.5	LOXL1	ENSG000000129038	lysyl oxidase like 1 Source HGNC Symbol Acc HGNC 6665
D08	SBH1220192	ENST00000544786.1	MAPK1	ENSG000000100030	mitogen-activated protein kinase 1 Source HGNC Symbol Acc HGNC 6871
D09	SBH0511192	ENST00000554709.1	MAX	ENSG000000125952	MYC associated factor X Source HGNC Symbol Acc HGNC 6913
D10	SBH0587302	ENST00000306010.8	MGMT	ENSG000000170430	O-6-methylguanine-DNA methyltransferase Source HGNC Symbol Acc HGNC 7059
D11	SBH1220213	ENST00000368654.8	MKI67	ENSG000000148773	marker of proliferation Ki-67 Source HGNC Symbol Acc HGNC 7107
D12	SBH0065684	ENST00000382723.5	MSX1	ENSG000000163132	msh homeobox 1 Source HGNC Symbol Acc HGNC 7391
E01	SBH0188756	ENST00000370305.5	MTO1	ENSG000000135297	mitochondrial tRNA translation optimization 1 Source HGNC Symbol Acc HGNC 19261
E02	SBH0499722	ENST00000422536.2	NDRG3	ENSG000000101079	NDRG family member 3 Source HGNC Symbol Acc HGNC 14462
E03	SBH1220264	ENST00000651197.1	NFKB1	ENSG000000109320	nuclear factor kappa B subunit 1 Source HGNC Symbol Acc HGNC 7794
E04	SBH0389757	ENST00000523261.1	NKX3-1	ENSG000000167034	NK3 homeobox 1 Source HGNC Symbol Acc HGNC 7838
E05	SBH0057786	ENST00000638122.1	NRIP1	ENSG000000180530	nuclear receptor interacting protein 1 Source HGNC Symbol Acc HGNC 8001
E06	SBH0051912	ENST00000418373.1	PDLIM4	ENSG000000131435	PDZ and LIM domain 4 Source HGNC Symbol Acc HGNC 16501
E07	SBH0257483	ENST00000441549.7	PDPK1	ENSG000000140992	3-phosphoinositide dependent protein kinase 1 Source HGNC Symbol Acc HGNC 8816
E08	SBH0076877	ENST00000477762.5	PES1	ENSG000000100029	pescadillo ribosomal biogenesis factor 1 Source HGNC Symbol Acc HGNC 8848
E09	SBH0598427	ENST00000341980.10	PPP2R1B	ENSG000000137713	protein phosphatase 2 scaffold subunit Abeta Source HGNC Symbol Acc HGNC 9303
E10	SBH0514318	ENST00000545223.1	PRKAB1	ENSG000000111725	protein kinase AMP-activated non-catalytic subunit beta 1 Source HGNC Symbol Acc HGNC 9378
E11	SBH1225378	ENST00000371953.8	PTEN	ENSG000000171862	phosphatase and tensin homolog Source HGNC Symbol Acc HGNC 9588
E12	SBH1220343	ENST00000540753.6	PTGS1	ENSG000000095303	prostaglandin-endoperoxide synthase 1 Source HGNC Symbol Acc HGNC 9604
F01	SBH1220344	ENST00000367468.10	PTGS2	ENSG000000073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
F02	SBH0264791	ENST00000458646.1	RARB	ENSG000000077092	retinoic acid receptor beta Source HGNC Symbol Acc HGNC 9865
F03	SBH0462049	ENST00000359365.8	RASSF1	ENSG000000068028	Ras association domain family member 1 Source HGNC Symbol Acc HGNC 9882
F04	SBH0097588	ENST00000477334.1	RBM39	ENSG000000131051	RNA binding motif protein 39 Source HGNC Symbol Acc HGNC 15923
F05	SBH0096687	ENST00000547018.5	SCAF11	ENSG000000139218	SR-related CTD associated factor 11 Source HGNC Symbol Acc HGNC 10784
F06	SBH0593952	ENST00000635172.1	SEPT7	ENSG000000122545	septin 7 Source HGNC Symbol Acc HGNC 1717
F07	SBH1220394	ENST00000220772.8	SFRP1	ENSG000000104332	secreted frizzled related protein 1 Source HGNC Symbol Acc HGNC 10776
F08	SBH0250727	ENST00000572182.5	SHBG	ENSG000000129214	sex hormone binding globulin Source HGNC Symbol Acc HGNC 10839
F09	SBH0449749	ENST00000536262.2	SLC5A8	ENSG000000256870	solute carrier family 5 member 8 Source HGNC Symbol Acc HGNC 19119
F10	SBH1220413	ENST00000330871.3	SOCS3	ENSG000000184557	suppressor of cytokine signaling 3 Source HGNC Symbol Acc HGNC 19391

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBH1220418	ENST00000244745.3	SOX4	ENSG00000124766	SRY-box 4 Source HGNC Symbol Acc HGNC 11200
F12	SBH0652491	ENST00000423161.3	SREBF1	ENSG00000072310	sterol regulatory element binding transcription factor 1 Source HGNC Symbol Acc HGNC 11289
G01	SBH0428349	ENST00000589152.5	STK11	ENSG00000118046	serine/threonine kinase 11 Source HGNC Symbol Acc HGNC 11389
G02	SBH0539513	ENST00000337768.10	SUPT7L	ENSG00000119760	SPT7 like, STAGA complex gamma subunit Source HGNC Symbol Acc HGNC 30632
G03	SBH0102008	ENST00000649730.1	TFPI2	ENSG00000105825	tissue factor pathway inhibitor 2 Source HGNC Symbol Acc HGNC 11761
G04	SBH0021613	ENST00000394863.8	TGFB11	ENSG00000140682	transforming growth factor beta 1 induced transcript 1 Source HGNC Symbol Acc HGNC 11767
G05	SBH0450624	ENST00000262768.11	TIMP2	ENSG00000035862	TIMP metalloproteinase inhibitor 2 Source HGNC Symbol Acc HGNC 11821
G06	SBH1220455	ENST00000266085.6	TIMP3	ENSG00000100234	TIMP metalloproteinase inhibitor 3 Source HGNC Symbol Acc HGNC 11822
G07	SBH0284865	ENST00000455813.1	TMPRSS2	ENSG00000184012	transmembrane serine protease 2 Source HGNC Symbol Acc HGNC 11876
G08	SBH0393775	ENST00000312584.4	TNFRSF10D	ENSG00000173530	TNF receptor superfamily member 10d Source HGNC Symbol Acc HGNC 11907
G09	SBH1220486	ENST00000445888.6	TP53	ENSG00000141510	tumor protein p53 Source HGNC Symbol Acc HGNC 11998
G10	SBH0280834	ENST00000535080.1	USP5	ENSG00000111667	ubiquitin specific peptidase 5 Source HGNC Symbol Acc HGNC 12628
G11	SBH0420322	ENST00000425836.6	VEGFA	ENSG00000112715	vascular endothelial growth factor A Source HGNC Symbol Acc HGNC 12680
G12	SBH0471995	ENST00000539731.5	ZNF185	ENSG00000147394	zinc finger protein 185 with LIM domain Source HGNC Symbol Acc HGNC 12976
H01	SBH1220543	ENST00000646664.1	ACTB	ENSG00000075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	SBH1220550	ENST00000558401.6	B2M	ENSG00000166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	SBH1220545	ENST00000396861.5	GAPDH	ENSG00000111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	SBH1220546	ENST00000298556.8	HPRT1	ENSG00000165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	SBH1220553	ENST00000546989.5	RPLP0	ENSG00000089157	ribosomal protein lateral stalk subunit P0 Source HGNC Symbol Acc HGNC 10371
H06	SBH1218553	Sybr_HGDC	HGDC	Sybr_HGDC	Human Genomic DNA Contamination
H07	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H08	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H09	SBH1218551	Sybr_QIC	QIC	Sybr_QIC	QuantiNova Internal Control
H10	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H11	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control
H12	SBH1218550	Sybr_PPC	PPC	Sybr_PPC	Positive PCR Control



## Related products

Product	Contents	Cat. no.
QuantiNova LNA PCR QC Panel	These panels are designed to assess the quality of RNA samples before characterization using QuantiNova LNA PCR Focus Panels; available in 96-well, 384-well, and Rotor-Disc 100 formats	249940
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 SYBR Green RT-PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml QuantiNova SYBR Green RT-PCR Master Mix, 20 $\mu$ l QuantiNova SYBR Green 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	208152
QuantiNova SYBR Green PCR Kit (100)*	For 100 x 20 $\mu$ l reactions: 1 ml 2x QuantiNova SYBR Green PCR Master Mix, 500 $\mu$ l QuantiNova Yellow Template Dilution Buffer, 250 $\mu$ l QN ROX Reference Dye, 1.9 ml Water	208052

\*Larger kit sizes available.

The QuantiNova LNA 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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