

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

## Rat Androgen Receptor Signaling Targets

Cat. no. 249950 SBRN-142ZR

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	Abcc4	Abhd2	Acsl3	Adams1	Aldh1a3	Appbp2	Ar	Atad2	Camkk2	Cenpn	Cited2	Ackr3
B	Cyp2u1	Dhcr24	Eaf2	Elk1	Elf2	Ern1	Errf1	Otulinl	Fkbp5	Fos	Fzd5	Gucy1a1
C	Herc3	Hpgd	Igf1r	Igfbp5	Irs2	Jun	Klk1c2	Klk4	Klkb1	Krt8	Lama1	Lifr
D	Lrig1	Lrrfp2	Maf	Map7d1	Mme	Mt2A	Myc	Ncapd3	Ndrg1	Nrkbl	Nrk2	Nrkbia
E	Nkx3-1	Orm1	Pak1ip1	Pgc	Pias1	Pik3r3	Pmepa1	Pipp1	Rab4a	Rel	Rela	Ripk4
F	Sgk1	Slc26a2	Slc45a3	Sms	Snai2	Sord	Sp1	Spdef	Srf	Steap4	Slk39	Tbc1d8
G	Tiparp	Tmprss2	Tpd52	Trib1	Tsc22d1	Tsc22d3	Vapa	AABR0707176 5.1	Wipi1	Zbtb10	Zbtb16	Zfp189
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

## Gene table: QuantiNova LNA PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	SBR1100129	ENSRNOT00000013366.7	Abcc4	ENSRNOG0000010064	ATP binding cassette subfamily C member 4 Source RGD Symbol Acc 620266
A02	SBR1133852	ENSRNOT00000023506.6	Abhd2	ENSRNOG0000017120	abhydrolase domain containing 2 Source RGD Symbol Acc 1311389
A03	SBR1174444	ENSRNOT00000020161.2	Acsl3	ENSRNOG0000014718	acyl-CoA synthetase long-chain family member 3 Source RGD Symbol Acc 70552
A04	SBR1097825	ENSRNOT00000002187.7	Adams1	ENSRNOG0000001607	ADAM metalloproteinase with thrombospondin type 1 motif, 1 Source RGD Symbol Acc 621241
A05	SBR1132733	ENSRNOT000000085158.1	Aldh1a3	ENSRNOG00000052070	aldehyde dehydrogenase 1 family, member A3 Source RGD Symbol Acc 628662
A06	SBR1153290	ENSRNOT000000033684.4	Appbp2	ENSRNOG0000027654	amyloid beta precursor protein binding protein 2 Source RGD Symbol Acc 1306488
A07	SBR1193668	ENSRNOT000000009129.7	Ar	ENSRNOG0000005639	androgen receptor Source RGD Symbol Acc 2147
A08	SBR1214495	ENSRNOT000000008508.7	Atad2	ENSRNOG0000025604	ATPase family, AAA domain containing 2 Source RGD Symbol Acc 1304849
A09	SBR1142607	ENSRNOT000000001774.6	Camkk2	ENSRNOG0000001309	calcium/calmodulin-dependent protein kinase kinase 2 Source RGD Symbol Acc 620092
A10	SBR1116802	ENSRNOT000000084445.1	Cenpn	ENSRNOG0000011296	centromere protein N Source RGD Symbol Acc 1310953
A11	SBR1094010	ENSRNOT000000086790.1	Cited2	ENSRNOG00000056940	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 2 Source RGD Symbol Acc 620112
A12	SBR1152673	ENSRNOT000000026558.3	Ackr3	ENSRNOG0000019622	atypical chemokine receptor 3 Source RGD Symbol Acc 620601
B01	SBR1174553	ENSRNOT000000089674.1	Cyp2u1	ENSRNOG0000011053	cytochrome P450, family 2, subfamily u, polypeptide 1 Source RGD Symbol Acc 1309433
B02	SBR1145371	ENSRNOT000000009402.6	Dhcr24	ENSRNOG00000006787	24-dehydrocholesterol reductase Source RGD Symbol Acc 1306529
B03	SBR1198476	ENSRNOT000000003208.5	Eaf2	ENSRNOG0000002350	ELL associated factor 2 Source RGD Symbol Acc 628879
B04	SBR1203710	ENSRNOT000000013522.5	Elk1	ENSRNOG0000010171	ELK1, ETS transcription factor Source RGD Symbol Acc 1598663
B05	SBR1169802	ENSRNOT000000032974.6	Ell2	ENSRNOG0000027089	elongation factor for RNA polymerase II 2 Source RGD Symbol Acc 1309296
B06	SBR1215639	ENSRNOT000000017371.5	Ern1	ENSRNOG0000012864	endoplasmic reticulum to nucleus signaling 1 Source RGD Symbol Acc 1559716
B07	SBR1131422	ENSRNOT000000085315.1	Errfi1	ENSRNOG00000058186	ERBB receptor feedback inhibitor 1 Source RGD Symbol Acc 1307599
B08	SBR1210608	ENSRNOT000000067638.3	Otulinl	ENSRNOG0000012109	OTU deubiquitinase with linear linkage specificity like Source RGD Symbol Acc 1563205
B09	SBR1101312	ENSRNOT000000033119.5	Fkbp5	ENSRNOG0000022523	FKBP prolyl isomerase 5 Source RGD Symbol Acc 1309155
B10	SBR1110295	ENSRNOT000000010712.3	Fos	ENSRNOG0000008015	Fos proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2626
B11	SBR1176179	ENSRNOT000000019698.4	Fzd5	ENSRNOG0000014678	frizzled class receptor 5 Source RGD Symbol Acc 631406
B12	SBR1205788	ENSRNOT000000017190.4	Gucy1a1	ENSRNOG0000012302	guanylate cyclase 1 soluble subunit alpha 1 Source RGD Symbol Acc 68436
C01	SBR1200981	ENSRNOT000000087451.1	Herc3	ENSRNOG0000007304	HECT and RLD domain containing E3 ubiquitin protein ligase 3 Source RGD Symbol Acc 1307803
C02	SBR1130617	ENSRNOT000000014229.4	Hpgd	ENSRNOG0000010610	15-hydroxyprostaglandin dehydrogenase Source RGD Symbol Acc 620087
C03	SBR1109208	ENSRNOT000000019267.6	Igf1r	ENSRNOG0000014187	insulin-like growth factor 1 receptor Source RGD Symbol Acc 2869
C04	SBR1137301	ENSRNOT000000079493.1	Igfbp5	ENSRNOG0000017206	insulin-like growth factor binding protein 5 Source RGD Symbol Acc 2876
C05	SBR1110764	ENSRNOT000000032918.6	Irs2	ENSRNOG0000023509	insulin receptor substrate 2 Source RGD Symbol Acc 69316
C06	SBR1133226	ENSRNOT000000011731.3	Jun	ENSRNOG0000026293	Jun proto-oncogene, AP-1 transcription factor subunit Source RGD Symbol Acc 2943
C07	SBR1103661	ENSRNOT000000025701.4	Klk1c2	ENSRNOG0000029237	kallikrein 1-related peptidase C2 Source RGD Symbol Acc 3888
C08	SBR1203061	ENSRNOT000000025614.4	Klk4	ENSRNOG0000018864	kallikrein-related peptidase 4 Source RGD Symbol Acc 1303228
C09	SBR1118567	ENSRNOT000000019237.5	Klk1b1	ENSRNOG0000014118	kallikrein B1 Source RGD Symbol Acc 67382
C10	SBR1155292	ENSRNOT000000038480.4	Krt8	ENSRNOG0000009779	keratin 8 Source RGD Symbol Acc 2984
		ENSRNOT000000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	SBR1129625	023226.6	Lama1	000017237	laminin subunit alpha 1 Source RGD Symbol Acc 1307207
C12	SBR1216304	ENSRNOT00000 016036.4	Lifr	ENSRNOG00 000011696	LIF receptor alpha Source RGD Symbol Acc 621431
D01	SBR1187889	ENSRNOT00000 072624.2	Lrig1	ENSRNOG00 000012952	leucine-rich repeats and immunoglobulin-like domains 1 Source RGD Symbol Acc 1306788
D02	SBR1218528	ENSRNOT00000 056060.2	Lrrfp2	ENSRNOG00 000021047	LRR binding FLII interacting protein 2 Source RGD Symbol Acc 1306234
D03	SBR1131539	ENSRNOT00000 016577.5	Maf	ENSRNOG00 000012428	MAF bZIP transcription factor Source RGD Symbol Acc 3034
D04	SBR1102994	ENSRNOT00000 065871.1	Map7d1	ENSRNOG00 000010237	MAP7 domain containing 1 Source RGD Symbol Acc 1597986
D05	SBR1198073	ENSRNOT00000 088565.1	Mme	ENSRNOG00 000009514	membrane metallo-endopeptidase Source RGD Symbol Acc 3098
D06	SBR1194539	ENSRNOT00000 067391.1	Mt2A	ENSRNOG00 000043098	metallothionein 2A Source RGD Symbol Acc 1592345
D07	SBR1106364	ENSRNOT00000 006188.5	Myc	ENSRNOG00 000004500	MYC proto-oncogene, bHLH transcription factor Source RGD Symbol Acc 3130
D08	SBR1197122	ENSRNOT00000 012078.7	Ncapd3	ENSRNOG00 000008932	non-SMC condensin II complex, subunit D3 Source RGD Symbol Acc 1562176
D09	SBR1150062	ENSRNOT00000 093459.1	Ndrp1	ENSRNOG00 000007393	N-myc downstream regulated 1 Source RGD Symbol Acc 1307303
D10	SBR1111134	ENSRNOT00000 036838.4	Nfkb1	ENSRNOG00 000023258	nuclear factor kappa B subunit 1 Source RGD Symbol Acc 70498
D11	SBR1164776	ENSRNOT00000 026235.3	Nfkb2	ENSRNOG00 000019311	nuclear factor kappa B subunit 2 Source RGD Symbol Acc 1307189
D12	SBR1120974	ENSRNOT00000 009894.6	Nfkbia	ENSRNOG00 000007390	NFKB inhibitor alpha Source RGD Symbol Acc 3171
E01	SBR1133199	ENSRNOT00000 020753.7	Nkx3-1	ENSRNOG00 000015477	NK3 homeobox 1 Source RGD Symbol Acc 1305369
E02	SBR1152786	ENSRNOT00000 010454.4	Orm1	ENSRNOG00 000007886	orosomuroid 1 Source RGD Symbol Acc 67390
E03	SBR1169058	ENSRNOT00000 036195.5	Pak1ip1	ENSRNOG00 000023799	PAK1 interacting protein 1 Source RGD Symbol Acc 1565353
E04	SBR1169808	ENSRNOT00000 019650.3	Pgc	ENSRNOG00 000014492	progastricin Source RGD Symbol Acc 3943
E05	SBR1181406	ENSRNOT00000 066009.1	Pias1	ENSRNOG00 000034272	protein inhibitor of activated STAT, 1 Source RGD Symbol Acc 1307843
E06	SBR1164074	ENSRNOT00000 000157.3	Pik3r3	ENSRNOG00 000000145	phosphoinositide-3-kinase regulatory subunit 3 Source RGD Symbol Acc 621042
E07	SBR1162271	ENSRNOT00000 071853.2	Pmepa1	ENSRNOG00 000050404	prostate transmembrane protein, androgen induced 1 Source RGD Symbol Acc 1308255
E08	SBR1133943	ENSRNOT00000 066098.3	Plpp1	ENSRNOG00 000009980	phospholipid phosphatase 1 Source RGD Symbol Acc 621832
E09	SBR1116311	ENSRNOT00000 049337.5	Rab4a	ENSRNOG00 000017467	RAB4A, member RAS oncogene family Source RGD Symbol Acc 3529
E10	SBR1170346	ENSRNOT00000 081077.1	Rel	ENSRNOG00 000054437	REL proto-oncogene, NF-kB subunit Source RGD Symbol Acc 1311231
E11	SBR1138204	ENSRNOT00000 045233.3	Rela	ENSRNOG00 000030888	RELA proto-oncogene, NF-kB subunit Source RGD Symbol Acc 727889
E12	SBR1145018	ENSRNOT00000 002206.5	Ripk4	ENSRNOG00 000001618	receptor-interacting serine-threonine kinase 4 Source RGD Symbol Acc 1311691
F01	SBR1176764	ENSRNOT00000 016121.5	Sgk1	ENSRNOG00 000011815	serum/glucocorticoid regulated kinase 1 Source RGD Symbol Acc 3668
F02	SBR1173570	ENSRNOT00000 024374.2	Slc26a2	ENSRNOG00 000018082	solute carrier family 26 member 2 Source RGD Symbol Acc 620622
F03	SBR1168980	ENSRNOT00000 010242.5	Slc45a3	ENSRNOG00 000007591	solute carrier family 45, member 3 Source RGD Symbol Acc 1309764
F04	SBR1214721	ENSRNOT00000 010135.6	Sms	ENSRNOG00 000007688	spermine synthase Source RGD Symbol Acc 1564826
F05	SBR1127823	ENSRNOT00000 073049.2	Snai2	ENSRNOG00 000047699	snail family transcriptional repressor 2 Source RGD Symbol Acc 3722
F06	SBR1189175	ENSRNOT00000 023350.6	Sord	ENSRNOG00 000017291	sorbitol dehydrogenase Source RGD Symbol Acc 3734
F07	SBR1200819	ENSRNOT00000 019403.6	Sp1	ENSRNOG00 000014084	Sp1 transcription factor Source RGD Symbol Acc 3738
F08	SBR1099723	ENSRNOT00000 000583.5	Spdef	ENSRNOG00 000000491	SAM pointed domain containing ets transcription factor Source RGD Symbol Acc 1594842
F09	SBR1136781	ENSRNOT00000 061430.3	Srf	ENSRNOG00 000018232	serum response factor Source RGD Symbol Acc 1559787
F10	SBR1160241	ENSRNOT00000 089086.1	Steap4	ENSRNOG00 000008602	STEAP4 metalloreductase Source RGD Symbol Acc 1560331

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	SBR1192309	ENSRNOT00000037133.5	Stk39	ENSRNOG0000024808	serine threonine kinase 39 Source RGD Symbol Acc 621643
F12	SBR1152876	ENSRNOT00000018640.6	Tbc1d8	ENSRNOG0000013583	TBC1 domain family, member 8 Source RGD Symbol Acc 1595491
G01	SBR1108412	ENSRNOT00000015387.6	Tiparp	ENSRNOG0000011238	TCDD-inducible poly(ADP-ribose) polymerase Source RGD Symbol Acc 1306171
G02	SBR1094671	ENSRNOT00000066413.3	Tmprss2	ENSRNOG0000001976	transmembrane serine protease 2 Source RGD Symbol Acc 620766
G03	SBR1190109	ENSRNOT00000077270.1	Tpd52	ENSRNOG0000011441	tumor protein D52 Source RGD Symbol Acc 1306767
G04	SBR1176486	ENSRNOT00000005885.5	Trib1	ENSRNOG0000004100	tribbles pseudokinase 1 Source RGD Symbol Acc 621596
G05	SBR1108181	ENSRNOT00000058206.4	Tsc22d1	ENSRNOG0000001030	TSC22 domain family, member 1 Source RGD Symbol Acc 3850
G06	SBR1123278	ENSRNOT00000085118.1	Tsc22d3	ENSRNOG0000056135	TSC22 domain family, member 3 Source RGD Symbol Acc 621654
G07	SBR1144015	ENSRNOT00000020681.6	Vapa	ENSRNOG0000014765	VAMP associated protein A Source RGD Symbol Acc 61803
G08	SBR1162946	ENSRNOT00000071573.2	AABR07071765.1	ENSRNOG0000047457	
G09	SBR1187883	ENSRNOT00000005172.7	Wipi1	ENSRNOG0000003827	WD repeat domain, phosphoinositide interacting 1 Source RGD Symbol Acc 1307754
G10	SBR1150768	ENSRNOT00000081553.1	Zbtb10	ENSRNOG0000061862	zinc finger and BTB domain containing 10 Source RGD Symbol Acc 708377
G11	SBR1207448	ENSRNOT00000045356.3	Zbtb16	ENSRNOG0000029980	zinc finger and BTB domain containing 16 Source RGD Symbol Acc 727921
G12	SBR1201659	ENSRNOT00000078502.1	Zfp189	ENSRNOG0000006972	zinc finger protein 189 Source RGD Symbol Acc 1306510
H01	SBR1220567	ENSRNOT00000042459.4	Actb	ENSRNOG0000034254	actin, beta Source RGD Symbol Acc 628837
H02	SBR1220568	ENSRNOT00000023017.5	B2m	ENSRNOG0000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	SBR1225377	ENSRNOT00000065935.3	Hprt1	ENSRNOG0000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	SBR1122313	ENSRNOT00000017468.2	Ldha	ENSRNOG0000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	SBR1220572	ENSRNOT00000018820.5	Rplp1	ENSRNOG0000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	SBR1218555	Sybr_RGDC	RGDC	Sybr_RGDC	Rat 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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