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

Rat Epithelial to Mesenchymal Transition (EMT)

Cat. no. 249955 UPRN-090ZA

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	Ahnak	Akt1	Bmp7	Cald1	Camk2n1	Cav2	Cdh1	Cdh2	Col1a2	Col3a1	Col5a2	Ccn2
B	Ctnnb1	Dsc2	Dsp	Egfr	Erbb3	Esr1	F11r	Fgfbp1	Fgfr2	Fkbp1a	Fn1	Foxc2
C	Fzd7	Gng11	Gsc	Gsk3b	Igfbp4	Il1rn	Ilk	Itga5	Itgav	Itgb1	Jag1	Krt14
D	Krt19	Krt7	Map1b	Mitf	Mmp2	Mmp3	Mmp9	Msn	Nodal	Notch1	Ocln	Pdgfrb
E	Plek2	Ppp3r1	Ptk2	LOC100365697	Rac1	Rgs2	Serpine1	Gemin2	Smad2	Snai1	Snai2	Snai3
F	Sox10	Sparc	Spp1	Stat3	Steap1	Tcf7l1	Tcf4	Tfpi2	Tgfb1	Tgfb2	Tgfb3	Timp1
G	Tmeff1	Tmem132a	Tspan13	Twist1	Vcan	Vim	Vps13a	Wnt11	Wnt5a	Wnt5b	Zeb1	Zeb2
H	Actb	B2m	Hprt1	Ldha	Rplp1	RGDC	QIC	QIC	QIC	PPC	PPC	PPC

Gene table: QuantiNova LNA Probe PCR Focus Panel

Position	Assay	Name	Symbol	Ensembl ID	Description
A01	UPFR1033124	ENSRNOT00000088387.1	Ahnak	ENSRNOG00000057569	AHNAK nucleoprotein Source RGD Symbol Acc 619779
A02	UPFR1083196	ENSRNOT00000031164.3	Akt1	ENSRNOG00000028629	AKT serine/threonine kinase 1 Source RGD Symbol Acc 2081
A03	UPFR1105126	ENSRNOT00000084990.1	Bmp7	ENSRNOG00000053384	bone morphogenetic protein 7 Source RGD Symbol Acc 620743
A04	UPFR1013841	ENSRNOT00000086377.1	Cald1	ENSRNOG00000010233	caldesmon 1 Source RGD Symbol Acc 2256
A05	UPFR1111028	ENSRNOT00000021864.2	Camk2n1	ENSRNOG00000016322	calcium/calmodulin-dependent protein kinase II inhibitor 1 Source RGD Symbol Acc 708430
A06	UPFR1045353	ENSRNOT00000080271.1	Cav2	ENSRNOG00000057713	caveolin 2 Source RGD Symbol Acc 620348
A07	UPFR1037315	ENSRNOT00000027346.2	Cdh1	ENSRNOG00000020151	cadherin 1 Source RGD Symbol Acc 69279
A08	UPFR1054833	ENSRNOT00000021170.6	Cdh2	ENSRNOG00000015602	cadherin 2 Source RGD Symbol Acc 69280
A09	UPFR1109083	ENSRNOT00000089292.1	Col1a2	ENSRNOG00000011292	collagen type I alpha 2 chain Source RGD Symbol Acc 621351
A10	UPFR1066020	ENSRNOT00000004956.4	Col3a1	ENSRNOG00000003357	collagen type III alpha 1 chain Source RGD Symbol Acc 71029
A11	UPFR1054012	ENSRNOT00000005073.7	Col5a2	ENSRNOG00000003736	collagen type V alpha 2 chain Source RGD Symbol Acc 70921
A12	UPFR1047569	ENSRNOT00000089196.1	Ccn2	ENSRNOG00000015036	cellular communication network factor 2 Source RGD Symbol Acc 621392
B01	UPFR1057605	ENSRNOT00000079085.1	Ctnnb1	ENSRNOG00000054172	catenin beta 1 Source RGD Symbol Acc 70487
B02	UPFR1021733	ENSRNOT00000082891.1	Dsc2	ENSRNOG00000039969	desmocollin 2 Source RGD Symbol Acc 1309426
B03	UPFR1093849	ENSRNOT00000018649.6	Dsp	ENSRNOG00000013928	desmoplakin Source RGD Symbol Acc 1305794
B04	UPFR1091984	ENSRNOT00000006087.2	Egfr	ENSRNOG00000004332	epidermal growth factor receptor Source RGD Symbol Acc 2543
B05	UPFR1089993	ENSRNOT00000006796.4	Erbb3	ENSRNOG00000004964	erb-b2 receptor tyrosine kinase 3 Source RGD Symbol Acc 69323
B06	UPFR1099141	ENSRNOT00000026350.7	Esr1	ENSRNOG00000019358	estrogen receptor 1 Source RGD Symbol Acc 2581
B07	UPFR1091423	ENSRNOT00000006141.5	F11r	ENSRNOG00000004414	F11 receptor Source RGD Symbol Acc 621842
B08	UPFR1044702	ENSRNOT00000004128.4	Fgfbp1	ENSRNOG00000003095	fibroblast growth factor binding protein 1 Source RGD Symbol Acc 621211
B09	UPFR1031158	ENSRNOT00000068183.2	Fgfr2	ENSRNOG00000016374	fibroblast growth factor receptor 2 Source RGD Symbol Acc 2611
B10	UPFR1119432	ENSRNOT00000012608.4	Fkbp1a	ENSRNOG00000008822	FKBP prolyl isomerase 1A Source RGD Symbol Acc 2617
B11	UPFR1089380	ENSRNOT00000057585.4	Fn1	ENSRNOG00000014288	fibronectin 1 Source RGD Symbol Acc 2624
B12	UPFR1102350	ENSRNOT00000072369.1	Foxc2	ENSRNOG00000047446	forkhead box C2 Source RGD Symbol Acc 621703
C01	UPFR1085249	ENSRNOT00000021569.6	Fzd7	ENSRNOG00000016119	frizzled class receptor 7 Source RGD Symbol Acc 2321905
C02	UPFR1034936	ENSRNOT00000075326.2	Gng11	ENSRNOG00000047914	G protein subunit gamma 11 Source RGD Symbol Acc 621515
C03	UPFR1038732	ENSRNOT00000014204.5	Gsc	ENSRNOG00000010605	goosecoid homeobox Source RGD Symbol Acc 631425
C04	UPFR1109626	ENSRNOT00000077612.1	Gsk3b	ENSRNOG00000002833	glycogen synthase kinase 3 beta Source RGD Symbol Acc 70982
C05	UPFR1118202	ENSRNOT00000014153.7	Igfbp4	ENSRNOG00000010635	insulin-like growth factor binding protein 4 Source RGD Symbol Acc 2875
C06	UPFR1086251	ENSRNOT00000007949.6	Il1rn	ENSRNOG00000005871	interleukin 1 receptor antagonist Source RGD Symbol Acc 621159
C07	UPFR1118308	ENSRNOT00000025906.4	Ilk	ENSRNOG00000018993	integrin-linked kinase Source RGD Symbol Acc 620063
C08	UPFR1023329	ENSRNOT00000087748.1	Itga5	ENSRNOG00000057451	integrin subunit alpha 5 Source RGD Symbol Acc 2925
C09	UPFR1097241	ENSRNOT00000006961.7	Itgav	ENSRNOG00000004912	integrin subunit alpha V Source RGD Symbol Acc 1310613
C10	UPFR1091655	ENSRNOT00000014785.5	Itgb1	ENSRNOG00000010966	integrin subunit beta 1 Source RGD Symbol Acc 2927
		ENSRNOT00000		ENSRNOG00	

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFR1082062	010638.7	Jag1	000007443	jagged 1 Source RGD Symbol Acc 2937
C12	UPFR1102701	ENSRNOT00000005285.4	Krt14	ENSRNOG00000003899	keratin 14 Source RGD Symbol Acc 1307463
D01	UPFR1087159	ENSRNOT00000019133.4	Krt19	ENSRNOG00000014233	keratin 19 Source RGD Symbol Acc 619936
D02	UPFR1015749	ENSRNOT00000010660.6	Krt7	ENSRNOG00000008057	keratin 7 Source RGD Symbol Acc 1310865
D03	UPFR1027358	ENSRNOT00000023460.5	Map1b	ENSRNOG00000017428	microtubule-associated protein 1B Source RGD Symbol Acc 3043
D04	UPFR1057784	ENSRNOT00000083127.1	Mitf	ENSRNOG00000008658	melanocyte inducing transcription factor Source RGD Symbol Acc 3092
D05	UPFR1080151	ENSRNOT00000022679.6	Mmp2	ENSRNOG00000016695	matrix metallopeptidase 2 Source RGD Symbol Acc 621316
D06	UPFR1017988	ENSRNOT00000012310.6	Mmp3	ENSRNOG00000032626	matrix metallopeptidase 3 Source RGD Symbol Acc 621317
D07	UPFR1032957	ENSRNOT00000023965.3	Mmp9	ENSRNOG00000017539	matrix metallopeptidase 9 Source RGD Symbol Acc 621320
D08	UPFR1111582	ENSRNOT00000093499.1	Msn	ENSRNOG00000030118	moesin Source RGD Symbol Acc 621260
D09	UPFR1057301	ENSRNOT00000000672.4	Nodal	ENSRNOG00000000556	nodal growth differentiation factor Source RGD Symbol Acc 1305994
D10	UPFR1044597	ENSRNOT00000026212.7	Notch1	ENSRNOG00000019322	notch 1 Source RGD Symbol Acc 3187
D11	UPFR1027887	ENSRNOT00000084667.1	Ocln	ENSRNOG00000018297	occludin Source RGD Symbol Acc 620089
D12	UPFR1052705	ENSRNOT00000086033.1	Pdgfrb	ENSRNOG00000018461	platelet derived growth factor receptor beta Source RGD Symbol Acc 3285
E01	UPFR1081119	ENSRNOT00000014125.5	Plek2	ENSRNOG00000010098	pleckstrin 2 Source RGD Symbol Acc 1305786
E02	UPFR1044255	ENSRNOT00000031275.6	Ppp3r1	ENSRNOG00000043210	protein phosphatase 3, regulatory subunit B, alpha Source RGD Symbol Acc 69230
E03	UPFR1115915	ENSRNOT00000011219.6	Ptk2	ENSRNOG00000007916	protein tyrosine kinase 2 Source RGD Symbol Acc 3443
E04	UPFR1107422	ENSRNOT00000016237.3	LOC100365697	ENSRNOG00000011771	protein tyrosine phosphatase type IVA 1 Source RGD Symbol Acc 9374124
E05	UPFR1019271	ENSRNOT00000001417.5	Rac1	ENSRNOG00000001068	Rac family small GTPase 1 Source RGD Symbol Acc 619755
E06	UPFR1098819	ENSRNOT00000005156.6	Rgs2	ENSRNOG00000003687	regulator of G-protein signaling 2 Source RGD Symbol Acc 621665
E07	UPFR1051798	ENSRNOT00000001916.2	Serpine1	ENSRNOG00000001414	serpin family E member 1 Source RGD Symbol Acc 3249
E08	UPFR1017377	ENSRNOT00000006137.5	Gemin2	ENSRNOG00000004360	gem (nuclear organelle) associated protein 2 Source RGD Symbol Acc 620842
E09	UPFR1057367	ENSRNOT00000046847.4	Smad2	ENSRNOG00000018140	SMAD family member 2 Source RGD Symbol Acc 3031
E10	UPFR1119713	ENSRNOT00000077581.1	Snai1	ENSRNOG00000009594	snail family transcriptional repressor 1 Source RGD Symbol Acc 620758
E11	UPFR1014151	ENSRNOT00000073049.2	Snai2	ENSRNOG00000047699	snail family transcriptional repressor 2 Source RGD Symbol Acc 3722
E12	UPFR1061475	ENSRNOT00000018387.6	Snai3	ENSRNOG00000013586	snail family transcriptional repressor 3 Source RGD Symbol Acc 1309658
F01	UPFR1096108	ENSRNOT00000015283.3	Sox10	ENSRNOG00000011305	SRY box 10 Source RGD Symbol Acc 3735
F02	UPFR1099979	ENSRNOT00000017486.7	Sparc	ENSRNOG00000012840	secreted protein acidic and cysteine rich Source RGD Symbol Acc 3742
F03	UPFR1100110	ENSRNOT00000067875.4	Spp1	ENSRNOG00000043451	secreted phosphoprotein 1 Source RGD Symbol Acc 3752
F04	UPFR1040072	ENSRNOT00000026760.4	Stat3	ENSRNOG00000019742	signal transducer and activator of transcription 3 Source RGD Symbol Acc 3772
F05	UPFR1013302	ENSRNOT00000000018.7	Steap1	ENSRNOG00000000017	STEAP family member 1 Source RGD Symbol Acc 1311543
F06	UPFR1026727	ENSRNOT00000020005.7	Tcf7l1	ENSRNOG00000014753	transcription factor 7 like 1 Source RGD Symbol Acc 1311671
F07	UPFR1028213	ENSRNOT00000081797.1	Tcf4	ENSRNOG00000012405	transcription factor 4 Source RGD Symbol Acc 69271
F08	UPFR1028812	ENSRNOT00000013989.3	Tfpi2	ENSRNOG00000010513	tissue factor pathway inhibitor 2 Source RGD Symbol Acc 628629
F09	UPFR1103881	ENSRNOT00000028051.4	Tgfb1	ENSRNOG00000020652	transforming growth factor, beta 1 Source RGD Symbol Acc 69051
F10	UPFR1046456	ENSRNOT00000087023.1	Tgfb2	ENSRNOG00000002418	transforming growth factor, beta 2 Source RGD Symbol Acc 70491

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFR1030751	ENSRNOT00000013516.5	Tgfb3	ENSRNOG00000009867	transforming growth factor, beta 3 Source RGD Symbol Acc 3851
F12	UPFR1060230	ENSRNOT00000013745.7	Timp1	ENSRNOG00000010208	TIMP metallopeptidase inhibitor 1 Source RGD Symbol Acc 621675
G01	UPFR1061888	ENSRNOT00000065775.2	Tmeff1	ENSRNOG00000008034	transmembrane protein with EGF-like and two follistatin-like domains 1 Source RGD Symbol Acc 62005
G02	UPFR1024236	ENSRNOT00000028971.4	Tmem132a	ENSRNOG00000021338	transmembrane protein 132A Source RGD Symbol Acc 727936
G03	UPFR1100807	ENSRNOT00000006752.5	Tspan13	ENSRNOG00000005046	tetraspanin 13 Source RGD Symbol Acc 1311788
G04	UPFR1038411	ENSRNOT00000014763.6	Twist1	ENSRNOG00000011101	twist family bHLH transcription factor 1 Source RGD Symbol Acc 621455
G05	UPFR1115726	ENSRNOT00000088313.1	Vcan	ENSRNOG00000029212	versican Source RGD Symbol Acc 619940
G06	UPFR1091277	ENSRNOT00000024430.5	Vim	ENSRNOG00000018087	vimentin Source RGD Symbol Acc 621646
G07	UPFR1034100	ENSRNOT00000014800.7	Vps13a	ENSRNOG00000025539	vacuolar protein sorting 13 homolog A Source RGD Symbol Acc 1311340
G08	UPFR1057474	ENSRNOT00000021674.5	Wnt11	ENSRNOG00000015982	Wnt family member 11 Source RGD Symbol Acc 621463
G09	UPFR1100946	ENSRNOT00000021164.3	Wnt5a	ENSRNOG00000015618	Wnt family member 5A Source RGD Symbol Acc 69250
G10	UPFR1070692	ENSRNOT00000011044.4	Wnt5b	ENSRNOG00000008168	Wnt family member 5B Source RGD Symbol Acc 628850
G11	UPFR1089048	ENSRNOT00000024336.7	Zeb1	ENSRNOG00000017863	zinc finger E-box binding homeobox 1 Source RGD Symbol Acc 3831
G12	UPFR1023599	ENSRNOT00000080382.1	Zeb2	ENSRNOG00000004677	zinc finger E-box binding homeobox 2 Source RGD Symbol Acc 1307272
H01	UPFR1132952	ENSRNOT00000080216.1	Actb	ENSRNOG00000034254	actin, beta Source RGD Symbol Acc 628837
H02	UPFR1132953	ENSRNOT00000023017.5	B2m	ENSRNOG00000017123	beta-2 microglobulin Source RGD Symbol Acc 2189
H03	UPFR1132959	ENSRNOT00000065935.3	Hprt1	ENSRNOG00000048561	hypoxanthine phosphoribosyltransferase 1 Source RGD Symbol Acc 2826
H04	UPFR1018740	ENSRNOT00000017468.2	Ldha	ENSRNOG00000013009	lactate dehydrogenase A Source RGD Symbol Acc 2996
H05	UPFR1132958	ENSRNOT00000018820.5	Rplp1	ENSRNOG00000013874	ribosomal protein lateral stalk subunit P1 Source RGD Symbol Acc 621774
H06	UPFR1126610	UPL_RGDC	RGDC	UPL_RGDC	Rat 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.