

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

Human Drug Metabolism: Phase I Enzymes

Cat. no. 249955 UPHS-068ZR

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	AADAC	ADH1A	ADH1B	ADH1C	ADH4	ADH5	ADH6	ADH7	ALDH1A1	ALDH1A2	ALDH1A3	ALDH1B1
B	ALDH2	ALDH3A1	ALDH3A2	ALDH3B1	ALDH3B2	ALDH4A1	ALDH5A1	ALDH6A1	ALDH7A1	ALDH8A1	ALDH9A1	CEL
C	CYP11A1	CYP11B1	CYP11B2	CYP17A1	CYP19A1	CYP1A1	CYP1A2	CYP1B1	CYP21A2	CYP24A1	CYP26A1	CYP26B1
D	CYP26C1	CYP27A1	CYP27B1	CYP2A13	CYP2B6	CYP2C18	CYP2C19	CYP2C8	CYP2C9	CYP2D6	CYP2E1	CYP2F1
E	CYP2R1	CYP2S1	CYP2W1	CYP3A4	CYP3A43	CYP3A5	CYP3A7	CYP4A11	CYP4A22	CYP4B1	CYP4F11	CYP4F12
F	CYP4F2	CYP4F3	CYP4F8	CYP7A1	CYP7B1	CYP8B1	DHRS2	DPYD	ESD	FMO1	FMO2	FMO3
G	FMO4	FMO5	GZMA	GZMB	HSD17B10	MAOA	MAOB	PTGS1	PTGS2	UCHL1	UCHL3	XDH
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	UPFH0510376	ENST00000488 869.1	AADAC	ENSG00000 114771	arylacetamide deacetylase Source HGNC Symbol Acc HGNC 17
A02	UPFH0025660	ENST00000511 656.1	ADH1A	ENSG00000 187758	alcohol dehydrogenase 1A (class I), alpha polypeptide Source HGNC Symbol Acc HGNC 249
A03	UPFH0125734	ENST00000305 046.13	ADH1B	ENSG00000 196616	alcohol dehydrogenase 1B (class I), beta polypeptide Source HGNC Symbol Acc HGNC 250
A04	UPFH0154565	ENST00000505 942.2	ADH1C	ENSG00000 248144	alcohol dehydrogenase 1C (class I), gamma polypeptide Source HGNC Symbol Acc HGNC 251
A05	UPFH0385430	ENST00000504 894.1	ADH4	ENSG00000 198099	alcohol dehydrogenase 4 (class II), pi polypeptide Source HGNC Symbol Acc HGNC 252
A06	UPFH1132220	ENST00000626 055.2	ADH5	ENSG00000 197894	alcohol dehydrogenase 5 (class III), chi polypeptide Source HGNC Symbol Acc HGNC 253
A07	UPFH0445569	ENST00000507 484.5	ADH6	ENSG00000 172955	alcohol dehydrogenase 6 (class V) Source HGNC Symbol Acc HGNC 255
A08	UPFH0115568	ENST00000482 593.5	ADH7	ENSG00000 196344	alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide Source HGNC Symbol Acc HGNC 256
A09	UPFH0409683	ENST00000482 210.5	ALDH1A1	ENSG00000 165092	aldehyde dehydrogenase 1 family member A1 Source HGNC Symbol Acc HGNC 402
A10	UPFH0040043	ENST00000347 587.7	ALDH1A2	ENSG00000 128918	aldehyde dehydrogenase 1 family member A2 Source HGNC Symbol Acc HGNC 15472
A11	UPFH0310463	ENST00000329 841.10	ALDH1A3	ENSG00000 184254	aldehyde dehydrogenase 1 family member A3 Source HGNC Symbol Acc HGNC 409
A12	UPFH0016073	ENST00000377 698.4	ALDH1B1	ENSG00000 137124	aldehyde dehydrogenase 1 family member B1 Source HGNC Symbol Acc HGNC 407
B01	UPFH0365632	ENST00000549 106.1	ALDH2	ENSG00000 111275	aldehyde dehydrogenase 2 family member Source HGNC Symbol Acc HGNC 404
B02	UPFH0615200	ENST00000395 555.7	ALDH3A1	ENSG00000 108602	aldehyde dehydrogenase 3 family member A1 Source HGNC Symbol Acc HGNC 405
B03	UPFH0497126	ENST00000630 662.2	ALDH3A2	ENSG00000 072210	aldehyde dehydrogenase 3 family member A2 Source HGNC Symbol Acc HGNC 403
B04	UPFH0330081	ENST00000614 849.4	ALDH3B1	ENSG00000 006534	aldehyde dehydrogenase 3 family member B1 Source HGNC Symbol Acc HGNC 410
B05	UPFH0531738	ENST00000525 827.5	ALDH3B2	ENSG00000 132746	aldehyde dehydrogenase 3 family member B2 Source HGNC Symbol Acc HGNC 411
B06	UPFH0278359	ENST00000375 341.8	ALDH4A1	ENSG00000 159423	aldehyde dehydrogenase 4 family member A1 Source HGNC Symbol Acc HGNC 406
B07	UPFH0022460	ENST00000348 925.2	ALDH5A1	ENSG00000 112294	aldehyde dehydrogenase 5 family member A1 Source HGNC Symbol Acc HGNC 408
B08	UPFH0543198	ENST00000554 501.5	ALDH6A1	ENSG00000 119711	aldehyde dehydrogenase 6 family member A1 Source HGNC Symbol Acc HGNC 7179
B09	UPFH0573058	ENST00000409 134.8	ALDH7A1	ENSG00000 164904	aldehyde dehydrogenase 7 family member A1 Source HGNC Symbol Acc HGNC 877
B10	UPFH0087073	ENST00000367 845.6	ALDH8A1	ENSG00000 118514	aldehyde dehydrogenase 8 family member A1 Source HGNC Symbol Acc HGNC 15471
B11	UPFH0269239	ENST00000471 457.1	ALDH9A1	ENSG00000 143149	aldehyde dehydrogenase 9 family member A1 Source HGNC Symbol Acc HGNC 412
B12	UPFH0181032	ENST00000372 080.6	CEL	ENSG00000 170835	carboxyl ester lipase Source HGNC Symbol Acc HGNC 1848
C01	UPFH0490188	ENST00000566 674.5	CYP11A1	ENSG00000 140459	cytochrome P450 family 11 subfamily A member 1 Source HGNC Symbol Acc HGNC 2590
C02	UPFH0111517	ENST00000314 111.4	CYP11B1	ENSG00000 160882	cytochrome P450 family 11 subfamily B member 1 Source HGNC Symbol Acc HGNC 2591
C03	UPFH0295836	ENST00000323 110.2	CYP11B2	ENSG00000 179142	cytochrome P450 family 11 subfamily B member 2 Source HGNC Symbol Acc HGNC 2592
C04	UPFH0464356	ENST00000638 971.1	CYP17A1	ENSG00000 148795	cytochrome P450 family 17 subfamily A member 1 Source HGNC Symbol Acc HGNC 2593
C05	UPFH0371849	ENST00000439 712.6	CYP19A1	ENSG00000 137869	cytochrome P450 family 19 subfamily A member 1 Source HGNC Symbol Acc HGNC 2594
C06	UPFH0157953	ENST00000379 727.8	CYP1A1	ENSG00000 140465	cytochrome P450 family 1 subfamily A member 1 Source HGNC Symbol Acc HGNC 2595
C07	UPFH0144678	ENST00000343 932.5	CYP1A2	ENSG00000 140505	cytochrome P450 family 1 subfamily A member 2 Source HGNC Symbol Acc HGNC 2596
C08	UPFH0402095	ENST00000491 456.1	CYP1B1	ENSG00000 138061	cytochrome P450 family 1 subfamily B member 1 Source HGNC Symbol Acc HGNC 2597
C09	UPFH1139632	ENST00000466 879.5	CYP21A2	ENSG00000 231852	cytochrome P450 family 21 subfamily A member 2 Source HGNC Symbol Acc HGNC 2600
C10	UPFH0337938	ENST00000487 593.1	CYP24A1	ENSG00000 019186	cytochrome P450 family 24 subfamily A member 1 Source HGNC Symbol Acc HGNC 2602
		ENST00000224		ENSG00000	cytochrome P450 family 26 subfamily A member 1 Source HGNC Symbol Acc

Position	Assay	Name	Symbol	Ensembl ID	Description
C11	UPFH0508662	356.5	CYP26A1	095596	HGNC 2603
C12	UPFH0562614	ENST000000001 146.6	CYP26B1	ENSG00000 003137	cytochrome P450 family 26 subfamily B member 1 Source HGNC Symbol Acc HGNC 20581
D01	UPFH0432311	ENST000000651 965.1	CYP26C1	ENSG00000 187553	cytochrome P450 family 26 subfamily C member 1 Source HGNC Symbol Acc HGNC 20577
D02	UPFH0614946	ENST000000466 602.1	CYP27A1	ENSG00000 135929	cytochrome P450 family 27 subfamily A member 1 Source HGNC Symbol Acc HGNC 2605
D03	UPFH0185932	ENST000000546 567.5	CYP27B1	ENSG00000 111012	cytochrome P450 family 27 subfamily B member 1 Source HGNC Symbol Acc HGNC 2606
D04	UPFH0110965	ENST000000330 436.3	CYP2A13	ENSG00000 197838	cytochrome P450 family 2 subfamily A member 13 Source HGNC Symbol Acc HGNC 2608
D05	UPFH0456289	ENST000000597 612.1	CYP2B6	ENSG00000 197408	cytochrome P450 family 2 subfamily B member 6 Source HGNC Symbol Acc HGNC 2615
D06	UPFH0533813	ENST000000285 979.11	CYP2C18	ENSG00000 108242	cytochrome P450 family 2 subfamily C member 18 Source HGNC Symbol Acc HGNC 2620
D07	UPFH0155901	ENST000000371 321.9	CYP2C19	ENSG00000 165841	cytochrome P450 family 2 subfamily C member 19 Source HGNC Symbol Acc HGNC 2621
D08	UPFH0490550	ENST000000628 935.1	CYP2C8	ENSG00000 138115	cytochrome P450 family 2 subfamily C member 8 Source HGNC Symbol Acc HGNC 2622
D09	UPFH0408357	ENST000000473 496.1	CYP2C9	ENSG00000 138109	cytochrome P450 family 2 subfamily C member 9 Source HGNC Symbol Acc HGNC 2623
D10	UPFH1124262	ENST000000645 361.2	CYP2D6	ENSG00000 100197	cytochrome P450 family 2 subfamily D member 6 Source HGNC Symbol Acc HGNC 2625
D11	UPFH0106530	ENST000000421 586.5	CYP2E1	ENSG00000 130649	cytochrome P450 family 2 subfamily E member 1 Source HGNC Symbol Acc HGNC 2631
D12	UPFH0131393	ENST000000331 105.7	CYP2F1	ENSG00000 197446	cytochrome P450 family 2 subfamily F member 1 Source HGNC Symbol Acc HGNC 2632
E01	UPFH0152703	ENST000000525 015.1	CYP2R1	ENSG00000 186104	cytochrome P450 family 2 subfamily R member 1 Source HGNC Symbol Acc HGNC 20580
E02	UPFH0367461	ENST000000595 590.1	CYP2S1	ENSG00000 167600	cytochrome P450 family 2 subfamily S member 1 Source HGNC Symbol Acc HGNC 15654
E03	UPFH0487089	ENST000000340 150.10	CYP2W1	ENSG00000 073067	cytochrome P450 family 2 subfamily W member 1 Source HGNC Symbol Acc HGNC 20243
E04	UPFH0526520	ENST000000354 593.6	CYP3A4	ENSG00000 160868	cytochrome P450 family 3 subfamily A member 4 Source HGNC Symbol Acc HGNC 2637
E05	UPFH0518954	ENST000000463 915.5	CYP3A43	ENSG00000 021461	cytochrome P450 family 3 subfamily A member 43 Source HGNC Symbol Acc HGNC 17450
E06	UPFH0069641	ENST000000469 622.5	CYP3A5	ENSG00000 106258	cytochrome P450 family 3 subfamily A member 5 Source HGNC Symbol Acc HGNC 2638
E07	UPFH0599359	ENST000000498 080.1	CYP3A7	ENSG00000 160870	cytochrome P450 family 3 subfamily A member 7 Source HGNC Symbol Acc HGNC 2640
E08	UPFH0132000	ENST000000475 477.5	CYP4A11	ENSG00000 187048	cytochrome P450 family 4 subfamily A member 11 Source HGNC Symbol Acc HGNC 2642
E09	UPFH0137045	ENST000000371 890.7	CYP4A22	ENSG00000 162365	cytochrome P450 family 4 subfamily A member 22 Source HGNC Symbol Acc HGNC 20575
E10	UPFH0117470	ENST000000464 439.6	CYP4B1	ENSG00000 142973	cytochrome P450 family 4 subfamily B member 1 Source HGNC Symbol Acc HGNC 2644
E11	UPFH0197693	ENST000000620 614.4	CYP4F11	ENSG00000 171903	cytochrome P450 family 4 subfamily F member 11 Source HGNC Symbol Acc HGNC 13265
E12	UPFH0376717	ENST000000548 237.5	CYP4F12	ENSG00000 186204	cytochrome P450 family 4 subfamily F member 12 Source HGNC Symbol Acc HGNC 18857
F01	UPFH0211283	ENST000000392 846.7	CYP4F2	ENSG00000 186115	cytochrome P450 family 4 subfamily F member 2 Source HGNC Symbol Acc HGNC 2645
F02	UPFH0138156	ENST000000587 360.1	CYP4F3	ENSG00000 186529	cytochrome P450 family 4 subfamily F member 3 Source HGNC Symbol Acc HGNC 2646
F03	UPFH0316683	ENST000000589 927.6	CYP4F8	ENSG00000 186526	cytochrome P450 family 4 subfamily F member 8 Source HGNC Symbol Acc HGNC 2648
F04	UPFH0370331	ENST000000301 645.4	CYP7A1	ENSG00000 167910	cytochrome P450 family 7 subfamily A member 1 Source HGNC Symbol Acc HGNC 2651
F05	UPFH0193665	ENST000000523 954.1	CYP7B1	ENSG00000 172817	cytochrome P450 family 7 subfamily B member 1 Source HGNC Symbol Acc HGNC 2652
F06	UPFH0422637	ENST000000437 102.1	CYP8B1	ENSG00000 180432	cytochrome P450 family 8 subfamily B member 1 Source HGNC Symbol Acc HGNC 2653
F07	UPFH0184538	ENST000000556 701.5	DHRS2	ENSG00000 100867	dehydrogenase/reductase 2 Source HGNC Symbol Acc HGNC 18349
F08	UPFH0417110	ENST000000370 192.7	DPYD	ENSG00000 188641	dihydropyrimidine dehydrogenase Source HGNC Symbol Acc HGNC 3012
F09	UPFH0409479	ENST000000412 582.5	ESD	ENSG00000 139684	esterase D Source HGNC Symbol Acc HGNC 3465
F10	UPFH0518351	ENST000000354 841.4	FMO1	ENSG00000 010932	flavin containing monooxygenase 1 Source HGNC Symbol Acc HGNC 3769

Position	Assay	Name	Symbol	Ensembl ID	Description
F11	UPFH0590482	ENST00000529 935.5	FMO2	ENSG00000 094963	flavin containing monooxygenase 2 Source HGNC Symbol Acc HGNC 3770
F12	UPFH0419632	ENST00000530 212.5	FMO3	ENSG00000 007933	flavin containing monooxygenase 3 Source HGNC Symbol Acc HGNC 3771
G01	UPFH0497436	ENST00000480 136.1	FMO4	ENSG00000 076258	flavin containing monooxygenase 4 Source HGNC Symbol Acc HGNC 3772
G02	UPFH0089195	ENST00000619 062.1	FMO5	ENSG00000 131781	flavin containing monooxygenase 5 Source HGNC Symbol Acc HGNC 3773
G03	UPFH0459336	ENST00000274 306.7	GZMA	ENSG00000 145649	granzyme A Source HGNC Symbol Acc HGNC 4708
G04	UPFH0018541	ENST00000526 004.1	GZMB	ENSG00000 100453	granzyme B Source HGNC Symbol Acc HGNC 4709
G05	UPFH0332969	ENST00000375 298.4	HSD17B10	ENSG00000 072506	hydroxysteroid 17-beta dehydrogenase 10 Source HGNC Symbol Acc HGNC 4800
G06	UPFH0432299	ENST00000338 702.3	MAOA	ENSG00000 189221	monoamine oxidase A Source HGNC Symbol Acc HGNC 6833
G07	UPFH0020129	ENST00000378 069.5	MAOB	ENSG00000 069535	monoamine oxidase B Source HGNC Symbol Acc HGNC 6834
G08	UPFH0450481	ENST00000619 306.5	PTGS1	ENSG00000 095303	prostaglandin-endoperoxide synthase 1 Source HGNC Symbol Acc HGNC 9604
G09	UPFH1132642	ENST00000367 468.10	PTGS2	ENSG00000 073756	prostaglandin-endoperoxide synthase 2 Source HGNC Symbol Acc HGNC 9605
G10	UPFH0452704	ENST00000472 501.5	UCHL1	ENSG00000 154277	ubiquitin C-terminal hydrolase L1 Source HGNC Symbol Acc HGNC 12513
G11	UPFH0372708	ENST00000377 595.7	UCHL3	ENSG00000 118939	ubiquitin C-terminal hydrolase L3 Source HGNC Symbol Acc HGNC 12515
G12	UPFH0207114	ENST00000379 416.4	XDH	ENSG00000 158125	xanthine dehydrogenase Source HGNC Symbol Acc HGNC 12805
H01	UPFH1132936	ENST00000646 664.1	ACTB	ENSG00000 075624	actin beta Source HGNC Symbol Acc HGNC 132
H02	UPFH1132937	ENST00000544 417.5	B2M	ENSG00000 166710	beta-2-microglobulin Source HGNC Symbol Acc HGNC 914
H03	UPFH1132938	ENST00000229 239.10	GAPDH	ENSG00000 111640	glyceraldehyde-3-phosphate dehydrogenase Source HGNC Symbol Acc HGNC 4141
H04	UPFH1132939	ENST00000298 556.8	HPRT1	ENSG00000 165704	hypoxanthine phosphoribosyltransferase 1 Source HGNC Symbol Acc HGNC 5157
H05	UPFH1132941	ENST00000392 514.9	RPLP0	ENSG00000 089157	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.

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