

miRCURY LNA™ miRNA Focus PCR Panels

Human Fibrosis Product Data Sheet

Cat. no. 339325 YAHS-217Z

For mature miRNA expression profiling using real-time PCR

Format	Suitable real-time cyclers	Plate	Cat. no.
A	Applied Biosystems® models 5700, 7000, 7300, 7500, 7700, 7900HT, ViiA™ 7 (96-well block); Bio-Rad® models iCycler®, iQ™5, MyiQ™, MyiQ2; Bio-Rad/MJ Research Chromo4™; Eppendorf® MasterCycler® ep realplex models 2, 2s, 4, 4s; Stratagene® models Mx3005P®, Mx3000P®; Takara: TP-800	96-well	YAHS-217ZA
C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)	96-well	YAHS-217ZC
D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®	96-well	YAHS-217ZD
E	Applied Biosystems® models 7900HT (384-well block), ViiA™ 7 (384-well block); Bio-Rad CFX384™	384-well	YAHS-217ZE
F	Roche® LightCycler® 480 (96-well block)	96-well	YAHS-217ZF
G	Roche® LightCycler® 480 (384-well block)	384-well	YAHS-217ZG

Description

The Human Fibrosis miRCURY LNA™ miRNA Focus PCR Panel profiles the expression of 84 miRNAs known to play a role in fibrosis. During tissue remodeling that occurs as part of wound healing, apoptosis removes myofibroblasts, and the deposited extracellular matrix (ECM) is remodeled to resemble the original tissue. Fibrosis occurs when inappropriate tissue remodeling results in excess ECM deposition due to inappropriate survival of myofibroblasts or lack of ECM proteolytic degradation. The inflammation and enhanced TGFβ signaling often present in fibrotic tissues causes cells to differentiate into myofibroblasts via epithelial-to-mesenchymal transition (EMT). miRNAs may play a role in conducting the pathogenesis of fibrosis by modulating the expression of genes involved in ECM remodeling and cell adhesion, inflammation, angiogenesis, TGFβ/CTGF signaling, and EMT. This array includes miRNAs that are differentially expressed during fibrosis and are known or predicted to modulate the expression of pro- and anti-fibrotic genes common to different fibrotic disorders such as systemic sclerosis, as well as liver, cardiac, kidney, and idiopathic pulmonary fibrosis. The profiling results from this array may yield insights into the molecular mechanisms behind the pathogenesis of fibrosis. A set of controls present on each array enables data analysis using the $\Delta\Delta CT$ method of relative quantification, assessment of reverse transcription performance, and assessment of PCR performance. Using SYBR Green real-time PCR, the expression of a focused panel of miRNAs involved in fibrosis can be easily and reliably analyzed with this miRCURY LNA™ miRNA Focus PCR Panel.

For further details, consult the *miRCURY LNA™ miRNA Focus PCR Panels Handbook*.

Array Layout

	1	2	3	4	5	6	7	8	9	10	11	12
A	hsa-let-7d-5p	hsa-miR-1-3p	hsa-miR-101-3p	hsa-miR-107	hsa-miR-10a-5p	hsa-miR-10b-5p	hsa-miR-122-5p	hsa-miR-125b-5p	hsa-miR-126-3p	hsa-miR-129-5p	hsa-miR-132-3p	hsa-miR-133a-3p
B	hsa-miR-141-3p	hsa-miR-142-3p	hsa-miR-143-3p	hsa-miR-145-5p	hsa-miR-146a-5p	hsa-miR-146b-5p	hsa-miR-148a-3p	hsa-miR-150-5p	hsa-miR-155-5p	hsa-miR-15b-5p	hsa-miR-16-5p	hsa-miR-17-5p
C	hsa-miR-18a-5p	hsa-miR-192-5p	hsa-miR-194-5p	hsa-miR-195-5p	hsa-miR-196a-5p	hsa-miR-199a-5p	hsa-miR-199b-5p	hsa-miR-19a-3p	hsa-miR-19b-3p	hsa-miR-200a-3p	hsa-miR-200b-3p	hsa-miR-203a-3p
D	hsa-miR-204-5p	hsa-miR-208a-3p	hsa-miR-20a-5p	hsa-miR-211-5p	hsa-miR-215-5p	hsa-miR-21-5p	hsa-miR-216a-5p	hsa-miR-217-5p	hsa-miR-223-3p	hsa-miR-23a-3p	hsa-miR-25-3p	hsa-miR-26a-5p
E	hsa-miR-26b-5p	hsa-miR-27a-3p	hsa-miR-27b-3p	hsa-miR-29a-3p	hsa-miR-29b-3p	hsa-miR-29c-3p	hsa-miR-302b-3p	hsa-miR-30a-5p	hsa-miR-31-5p	hsa-miR-324-3p	hsa-miR-324-5p	hsa-miR-325
F	hsa-miR-32-5p	hsa-miR-328-3p	hsa-miR-335-5p	hsa-miR-338-5p	hsa-miR-34a-5p	hsa-miR-372-3p	hsa-miR-375-3p	hsa-miR-377-3p	hsa-miR-378a-3p	hsa-miR-382-5p	hsa-miR-449a	hsa-miR-449b-5p
G	hsa-miR-451a	hsa-miR-491-5p	hsa-miR-5011-5p	hsa-miR-503-5p	hsa-miR-5692a	hsa-miR-590-5p	hsa-miR-661	hsa-miR-663a	hsa-miR-744-5p	hsa-miR-7-5p	hsa-miR-874-3p	hsa-miR-92a-3p
H	cel-miR-39-3p	cel-miR-39-3p	SNORD44 (hsa)	SNORD388 (hsa)	SNORD49A (hsa)	U6 snRNA (v2)	UniSp2	UniSp4	UniSp5	UniSp6	UniSp3	UniSp3

miRNA Table

Well	miRNA ID	Accession #	Assay Catalog #	Well	miRNA ID	Accession #	Assay Catalog #
A01	hsa-let-7d-5p	MIMAT0000065	YP00204124	E01	hsa-miR-26b-5p	MIMAT0000083	YP00204172
A02	hsa-miR-1-3p	MIMAT0000416	YP00204344	E02	hsa-miR-27a-3p	MIMAT0000084	YP00206038
A03	hsa-miR-101-3p	MIMAT0000099	YP00204786	E03	hsa-miR-27b-3p	MIMAT0000419	YP00205915
A04	hsa-miR-107	MIMAT0000104	YP00204468	E04	hsa-miR-29a-3p	MIMAT0000086	YP00204698
A05	hsa-miR-10a-5p	MIMAT0000253	YP00204778	E05	hsa-miR-29b-3p	MIMAT0000100	YP00204679
A06	hsa-miR-10b-5p	MIMAT0000254	YP00205637	E06	hsa-miR-29c-3p	MIMAT0000681	YP00204729
A07	hsa-miR-122-5p	MIMAT0000421	YP00205664	E07	hsa-miR-302b-3p	MIMAT0000715	YP00204773
A08	hsa-miR-125b-5p	MIMAT0000423	YP00205713	E08	hsa-miR-30a-5p	MIMAT0000087	YP00205695
A09	hsa-miR-126-3p	MIMAT0000445	YP00204227	E09	hsa-miR-31-5p	MIMAT0000089	YP00204236
A10	hsa-miR-129-5p	MIMAT0000242	YP00204534	E10	hsa-miR-324-3p	MIMAT0000762	YP00204303
A11	hsa-miR-132-3p	MIMAT0000426	YP00206035	E11	hsa-miR-324-5p	MIMAT0000761	YP02119473
A12	hsa-miR-133a-3p	MIMAT0000427	YP00204788	E12	hsa-miR-325	MIMAT0000771	YP00204464
B01	hsa-miR-141-3p	MIMAT0000432	YP00204504	F01	hsa-miR-32-5p	MIMAT0000090	YP00204792
B02	hsa-miR-142-3p	MIMAT0000434	YP00204291	F02	hsa-miR-328-3p	MIMAT0000752	YP00204364
B03	hsa-miR-143-3p	MIMAT0000435	YP00205992	F03	hsa-miR-335-5p	MIMAT0000765	YP02119293
B04	hsa-miR-145-5p	MIMAT0000437	YP00204483	F04	hsa-miR-338-5p	MIMAT0004701	YP00204114
B05	hsa-miR-146a-5p	MIMAT0000449	YP00204688	F05	hsa-miR-34a-5p	MIMAT0000255	YP00204486
B06	hsa-miR-146b-5p	MIMAT0002809	YP02119310	F06	hsa-miR-372-3p	MIMAT0000724	YP00204137
B07	hsa-miR-148a-3p	MIMAT0000243	YP00205867	F07	hsa-miR-375-3p	MIMAT0000728	YP00204362
B08	hsa-miR-150-5p	MIMAT0000451	YP00204660	F08	hsa-miR-377-3p	MIMAT0000730	YP00204733
B09	hsa-miR-155-5p	MIMAT0000646	YP02119311	F09	hsa-miR-378a-3p	MIMAT0000732	YP00205946
B10	hsa-miR-15b-5p	MIMAT0000417	YP00204243	F10	hsa-miR-382-5p	MIMAT0000737	YP00204169
B11	hsa-miR-16-5p	MIMAT0000069	YP00205702	F11	hsa-miR-449a	MIMAT0001541	YP00204481
B12	hsa-miR-17-5p	MIMAT0000070	YP02119304	F12	hsa-miR-449b-5p	MIMAT0003327	YP00204751
C01	hsa-miR-18a-5p	MIMAT0000072	YP00204207	G01	hsa-miR-451a	MIMAT0001631	YP02119305
C02	hsa-miR-192-5p	MIMAT0000222	YP00204099	G02	hsa-miR-491-5p	MIMAT0002807	YP00204695
C03	hsa-miR-194-5p	MIMAT0000460	YP00204080	G03	hsa-miR-5011-5p	MIMAT0021045	YP02103375
C04	hsa-miR-195-5p	MIMAT0000461	YP00205869	G04	hsa-miR-503-5p	MIMAT0002874	YP00204334
C05	hsa-miR-196a-5p	MIMAT0000226	YP00204386	G05	hsa-miR-5692a	MIMAT0022484	YP02119363
C06	hsa-miR-199a-5p	MIMAT0000231	YP00204494	G06	hsa-miR-590-5p	MIMAT0003258	YP00204222
C07	hsa-miR-199b-5p	MIMAT0000263	YP00204152	G07	hsa-miR-661	MIMAT0003324	YP00204657
C08	hsa-miR-19a-3p	MIMAT0000073	YP00205862	G08	hsa-miR-663a	MIMAT0003326	YP00204284
C09	hsa-miR-19b-3p	MIMAT0000074	YP00204450	G09	hsa-miR-744-5p	MIMAT0004945	YP00204663
C10	hsa-miR-200a-3p	MIMAT0000682	YP00204707	G10	hsa-miR-7-5p	MIMAT0000252	YP02119317
C11	hsa-miR-200b-3p	MIMAT0000318	YP00206071	G11	hsa-miR-874-3p	MIMAT0004911	YP00204761
C12	hsa-miR-203a-3p	MIMAT0000264	YP00205914	G12	hsa-miR-92a-3p	MIMAT0000092	YP00204258
D01	hsa-miR-204-5p	MIMAT0000265	YP00206072	H01	cel-miR-39-3p	MIMAT0000010	YP00203952
D02	hsa-miR-208a-3p	MIMAT0000241	YP00205619	H02	cel-miR-39-3p	MIMAT0000010	YP00203952
D03	hsa-miR-20a-5p	MIMAT0000075	YP00204292	H03	SNORD44 (hsa)	N/A	YP00203902
D04	hsa-miR-211-5p	MIMAT0000268	YP00204009	H04	SNORD388 (hsa)	N/A	YP00203901
D05	hsa-miR-215-5p	MIMAT0000272	YP00204598	H05	SNORD49A (hsa)	N/A	YP00203904
D06	hsa-miR-21-5p	MIMAT0000076	YP00204230	H06	U6 snRNA (v2)	N/A	YP02119464
D07	hsa-miR-216a-5p	MIMAT0000273	YP00204167	H07	UniSp2	N/A	YP00203950
D08	hsa-miR-217-5p	MIMAT0000274	YP00204010	H08	UniSp4	N/A	YP00203953
D09	hsa-miR-223-3p	MIMAT0000280	YP00205986	H09	UniSp5	N/A	YP00203955
D10	hsa-miR-23a-3p	MIMAT0000078	YP00204772	H10	UniSp6	N/A	YP00203954
D11	hsa-miR-25-3p	MIMAT0000081	YP00204361	H11	UniSP3	N/A	YP02119288
D12	hsa-miR-26a-5p	MIMAT0000082	YP00206023	H12	UniSP3	N/A	YP02119288

Functional Groupings

Pro-Fibrotic: hsa-miR-142-3p, hsa-miR-145-5p, hsa-miR-155-5p, hsa-miR-192-5p, hsa-miR-199b-5p, hsa-miR-208a-3p, hsa-miR-21-5p, hsa-miR-215-5p, hsa-miR-216a-5p, hsa-miR-27a-3p, hsa-miR-27b-3p, hsa-miR-30a-5p, hsa-miR-32-5p, hsa-miR-338-5p, hsa-miR-34a-5p, hsa-miR-377-3p, hsa-miR-382-5p, hsa-miR-5011-5p, hsa-miR-5692a.

Anti-Fibrotic: hsa-let-7d-5p, hsa-miR-107, hsa-miR-132-3p, hsa-miR-133a-3p, hsa-miR-141-3p, hsa-miR-15b-5p, hsa-miR-16-5p, hsa-miR-17-5p, hsa-miR-18a-5p, hsa-miR-194-5p, hsa-miR-19a-3p, hsa-miR-19b-3p, hsa-miR-200a-3p, hsa-miR-200b-3p, hsa-miR-204-5p, hsa-miR-20a-5p, hsa-miR-211-5p, hsa-miR-26a-5p, hsa-miR-26b-5p, hsa-miR-29b-3p, hsa-miR-335-5p, hsa-miR-449a, hsa-miR-449b-5p, hsa-miR-590-5p, hsa-miR-92a-3p.

Extracellular Matrix & Cell Adhesion: hsa-miR-1-3p, hsa-miR-10a-5p, hsa-miR-10b-5p, hsa-miR-143-3p, hsa-miR-145-5p, hsa-miR-16-5p, hsa-miR-196a-5p, hsa-miR-199a-5p, hsa-miR-199b-5p, hsa-miR-203a-3p, hsa-miR-204-5p, hsa-miR-21-5p, hsa-miR-217-5p, hsa-miR-25-3p, hsa-miR-27a-3p, hsa-miR-27b-3p, hsa-miR-29a-3p, hsa-miR-29b-3p, hsa-miR-29c-3p, hsa-miR-30a-5p, hsa-miR-449a, hsa-miR-451a, hsa-miR-661, hsa-miR-7-5p.

Inflammation: hsa-let-7d-5p, hsa-miR-122-5p, hsa-miR-129-5p, hsa-miR-142-3p, hsa-miR-146a-5p, hsa-miR-155-5p, hsa-miR-199a-5p, hsa-miR-204-5p, hsa-miR-21-5p, hsa-miR-503-5p.

Angiogenesis: hsa-let-7d-5p, hsa-miR-107, hsa-miR-126-3p, hsa-miR-145-5p, hsa-miR-150-5p, hsa-miR-15b-5p, hsa-miR-16-5p, hsa-miR-17-5p, hsa-miR-195-5p, hsa-miR-200b-3p, hsa-miR-20a-5p, hsa-miR-29b-3p, hsa-miR-31-5p, hsa-miR-34a-5p, hsa-miR-372-3p, hsa-miR-375-3p, hsa-miR-378a-3p.

Signal Transduction & Transcriptional Regulation: hsa-miR-1-3p, hsa-miR-101-3p, hsa-miR-122-5p, hsa-miR-125b-5p, hsa-miR-133a-3p, hsa-miR-141-3p, hsa-miR-145-5p, hsa-miR-146a-5p, hsa-miR-146b-5p, hsa-miR-148a-3p, hsa-miR-155-5p, hsa-miR-15b-5p, hsa-miR-16-5p, hsa-miR-17-5p, hsa-miR-18a-5p, hsa-miR-192-5p, hsa-miR-195-5p, hsa-miR-19a-3p, hsa-miR-19b-3p, hsa-miR-203a-3p, hsa-miR-204-5p, hsa-miR-20a-5p, hsa-miR-21-5p, hsa-miR-217-5p, hsa-miR-223-3p, hsa-miR-23a-3p, hsa-miR-26a-5p, hsa-miR-27a-3p, hsa-miR-29a-3p, hsa-miR-29b-3p, hsa-miR-29c-3p, hsa-miR-302b-3p, hsa-miR-30a-5p, hsa-miR-324-3p, hsa-miR-324-5p, hsa-miR-328-3p, hsa-miR-34a-5p, hsa-miR-372-3p, hsa-miR-378a-3p, hsa-miR-449a, hsa-miR-451a, hsa-miR-491-5p, hsa-miR-590-5p, hsa-miR-663a, hsa-miR-744-5p, hsa-miR-92a-3p.

Epithelial-to-Mesenchymal Transition (EMT): hsa-let-7d-5p, hsa-miR-107, hsa-miR-155-5p, hsa-miR-199a-5p, hsa-miR-199b-5p, hsa-miR-200a-3p, hsa-miR-200b-3p, hsa-miR-215-5p, hsa-miR-29a-3p, hsa-miR-29b-3p, hsa-miR-29c-3p, hsa-miR-325, hsa-miR-382-5p, hsa-miR-874-3p.

Ordering Information

Product	Contents	Cat. no.
miRCURY LNA miRNA Focus PCR Panels	miRCURY LNA miRNA PCR Panels for application-based miRNome profiling, available in 96-well or 384-well format; for SYBR® Green-based detection	339325
miRCURY LNA miRNA miRNome PCR Panels	miRCURY LNA miRNA PCR Panels for PCR-based miRNome profiling, available in 384-well format; for SYBR® Green-based detection	339322
miRCURY LNA miRNA QC PCR Panel	miRCURY LNA miRNA PCR Panel of quality control assays, available in 96-well or 384-well format; for SYBR® Green-based detection	339331
miRCURY LNA miRNA Custom PCR Panels	8 identical, ready-to-use 96- or 384-well plates; each well contains primers sufficient for one 10 µl reaction; for SYBR® Green-based detection	339330
miRCURY LNA Custom PCR Panel Additional Plate	Additional miRCURY LNA Custom PCR Panel plates; set of 4 plates; only available in addition to the base plates ordered through the core product (cat. no. 339330)	339332
miRCURY LNA miRNA PCR Assays	Contains forward and reverse primers for 200 SYBR® Green-based, real-time qPCR reactions, 166 EvaGreen-based digital PCR reactions for Nanoplate 8.5k or 50 EvaGreen-based digital PCR reactions for Nanoplate 26k	339306
miRCURY LNA miRNA Probe PCR Assays	Complete premixed assays containing LNA-enhanced target-specific forward primer and probe. For 200 reactions.	339350
miRCURY LNA miRNA Custom Probe PCR Assays	Custom-designed, target-specific forward primer and probe for any user-defined miRNA target. Complete premixed assay for 200 reactions.	339351

Related Products

Product	Contents	Cat. no.
miRCURY LNA RT Kit	For 8–64 cDNA synthesis reactions: 5x RT SYBR Green Reaction Buffer, 5x RT Probe Reaction Buffer, 10x RT Enzyme Mix, UniSp6, RNA Spike-in template, RNase-Free Water	339340
RNA Spike-In Kit, For RT	Contains the UniSp2, UniSp4, and UniSp5 RNA Spike-in Template Mix and the cel-miR-39-3p RNA Spike-in Template	339390
miRCURY LNA SYBR® Green PCR Kits (200)	For 200 reactions: 2X miRCURY SYBR Green Master Mix, RNase-Free Water	339345
miRCURY LNA SYBR® Green PCR Kits (600)	For 600 reactions: 2X miRCURY SYBR Green Master Mix, RNase-Free Water	339346
miRCURY LNA SYBR® Green PCR Kits (4000)	For 4000 reactions: 2X miRCURY SYBR Green Master Mix, RNase-Free Water	339347
miRCURY LNA Probe PCR Kit (200)	For 200 reactions: 2X QuantiNova Probe Master Mix, 10X miRCURY Probe Univ. Primer, Rox Reference Dye, RNase-Free Water	339371
miRCURY LNA Probe PCR Kit (800)	For 800 reactions: 2X QuantiNova Probe Master Mix, 10X miRCURY Probe Univ. Primer, Rox Reference Dye, RNase-Free Water	339372
miRCURY LNA Probe PCR Kit (4000)	For 4000 reactions: 2X QuantiNova Probe Master Mix, 10X miRCURY Probe Univ. Primer, Rox Reference Dye, RNase-Free Water	339373
miRCURY LNA miRNA PCR Starter Kit	Two miRCURY LNA PCR Assays of your choice, spike-in control Assay (UniSp6), one candidate endogenous control assay (miR-103-3p) and all reagents for 20 reverse transcription reactions and 100 PCR amplifications; for SYBR® Green-based qPCR detection	339320

Important

The miRCURY LNA™ miRNA PCR Panels are Ready-to-Use and designed for optimal performance with the miRCURY LNA RT Kit and the miRCURY LNA SYBR® Green PCR Kit. The performance of the primer sets will be affected when used in combination with less than optimal reagents. Use the miRCURY LNA miRNA PCR Panel Handbook for experiment setup. RNA work requires specific handling and precautions should be taken to prevent RNase contamination and degradation of the RNA sample and reagents.

Shipping and storage

The Ready-to-Use miRCURY LNA miRNA PCR Panels are shipped at room temperature and can be stored at 4°C for at least 6 months. For long term storage, it is recommended to place the panels at -20°C. Under these conditions, the LNA PCR primers are stable for at least 6 months after receipt.

Intended use

miRCURY LNA miRNA PCR Assays are intended for molecular biology applications. This product is not intended for the diagnosis, prevention or treatment of a disease.

Safety information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate safety data sheets (SDSs). These are available online in convenient and compact PDF format at **www.qiagen.com/safety** where you can find, view and print the SDS for each QIAGEN kit and kit component.

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