miRCURY LNA™ miRNA Focus PCR Panels
Mouse Immunopathology V2 Product Data Sheet

Cat. no. 339325 YAMM-204Y

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	YAMM-204YA
C	Applied Biosystems models 7500 (Fast block), 7900HT (Fast block), StepOnePlus™, ViiA 7 (Fast block)	96-well	YAMM-204YC
D	Bio-Rad CFX96™; Bio-Rad/MJ Research models DNA Engine Opticon®, DNA Engine Opticon 2; Stratagene Mx4000®	96-well	YAMM-204YD
E	Applied Biosystems® models 7900HT (384-well block), ViiA™ 7 (384-well block); Bio-Rad CFX384™	384-well	YAMM-204YE
F	Roche® LightCycler® 480 (96-well block)	96-well	YAMM-204YF
G	Roche® LightCycler® 480 (384-well block)	384-well	YAMM-204YG

Description

The Mouse Immunopathology V2 miRCURY LNA™ miRNA Focus PCR Panel profiles the expression of 84 miRNAs differentially expressed during normal and pathological responses by the immune system. This array provides immunology researchers with a convenient way to quickly analyze the miRNAs most relevant to the function of lymphocytes and other immune cells. The miRNAs have been carefully selected based on results published in peer-reviewed journals that suggest a correlation with inflammation, leukemia, lymphoma, autoimmune disorders, or other immune responses. Other miRNAs included on the array have been shown to functionally target specific transcripts encoding cytokines, other immunological regulatory proteins, and immune response signaling pathway components. The profiling results from this array can serve as a useful molecular marker for the study of normal and disease-associated immune responses. The results may also provide a deeper understanding of the molecular mechanisms regulating immunological gene expression by miRNA. A set of controls present on this array enables data analysis using the ΔΔCT method of relative quantification, assessment of reverse transcription performance, and assessment of PCR performance. Using SYBR Green-based real-time PCR, the expression of a focused panel of miRNAs related to immunopathology 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	mmu-let-7a-5p	mmu-let-7c-5p	mmu-let-7d-5p	mmu-let-7e-5p	mmu-let-7g-5p	mmu-miR-103-3p	mmu-miR-105	mmu-miR-106a-5p	mmu-miR-125a-5p	mmu-miR-125b-5p	mmu-miR-126a-3p	mmu-miR-129-5p
B	mmu-miR-130a-3p	mmu-miR-132-3p	mmu-miR-134-5p	mmu-miR-135a-5p	mmu-miR-135b-5p	mmu-miR-138-5p	mmu-miR-140-5p	mmu-miR-142a-3p	mmu-miR-142a-5p	mmu-miR-145a-5p	mmu-miR-146a-5p	mmu-miR-146b-5p
C	mmu-miR-147-3p	mmu-miR-148a-3p	mmu-miR-149-5p	mmu-miR-150-5p	mmu-miR-152-3p	mmu-miR-155-5p	mmu-miR-15a-5p	mmu-miR-15b-5p	mmu-miR-16-5p	mmu-miR-181a-5p	mmu-miR-182-5p	mmu-miR-183-5p
D	mmu-miR-184-3p	mmu-miR-185-5p	mmu-miR-186-5p	mmu-miR-187-3p	mmu-miR-18a-5p	mmu-miR-18b-5p	mmu-miR-191-5p	mmu-miR-194-5p	mmu-miR-195a-5p	mmu-miR-196a-5p	mmu-miR-19a-3p	mmu-miR-19b-3p
E	mmu-miR-200a-3p	mmu-miR-203-3p	mmu-miR-205-5p	mmu-miR-207	mmu-miR-20a-5p	mmu-miR-20b-5p	mmu-miR-21a-5p	mmu-miR-210-3p	mmu-miR-214-3p	mmu-miR-223-3p	mmu-miR-23b-3p	mmu-miR-26a-5p
F	mmu-miR-26b-5p	mmu-miR-27a-3p	mmu-miR-27b-3p	mmu-miR-28a-5p	mmu-miR-298-5p	mmu-miR-299a-3p	mmu-miR-29b-3p	mmu-miR-29c-3p	mmu-miR-30b-5p	mmu-miR-30c-5p	mmu-miR-30e-5p	mmu-miR-31-5p
G	mmu-miR-320-3p	mmu-miR-325-3p	mmu-miR-335-5p	mmu-miR-34a-5p	mmu-miR-34c-5p	mmu-miR-383-5p	mmu-miR-409-3p	mmu-miR-451a	mmu-miR-493-3p	mmu-miR-574-3p	mmu-miR-9-5p	mmu-miR-98-5p
H	cel-miR-39-3p	cel-miR-39-3p	U6 snRNA (v2)	5S rRNA	RNU5G	RNU1A1	UniSp2	UniSp4	UniSp5	UniSp6	UniSP3	UniSP3

miRNA Table

Well	miRNA ID	Accession #	Assay Catalog #	Well	miRNA ID	Accession #	Assay Catalog #
A01	mmu-let-7a-5p	MIMAT0000062	YP00205727	E01	mmu-miR-200a-3p	MIMAT0000682	YP00204707
A02	mmu-let-7c-5p	MIMAT0000064	YP00204767	E02	mmu-miR-203-3p	MIMAT0000264	YP00205914
A03	mmu-let-7d-5p	MIMAT0000065	YP00204124	E03	mmu-miR-205-5p	MIMAT0000266	YP00204487
A04	mmu-let-7e-5p	MIMAT0000066	YP00205711	E04	mmu-miR-207	MIMAT0000240	YP00205084
A05	mmu-let-7g-5p	MIMAT0000414	YP00204565	E05	mmu-miR-20a-5p	MIMAT0000075	YP00204292
A06	mmu-miR-103-3p	MIMAT0000101	YP00204063	E06	mmu-miR-20b-5p	MIMAT0001413	YP00204755
A07	mmu-miR-105	MIMAT0004856	YP00205090	E07	mmu-miR-21a-5p	MIMAT0000076	YP00204230
A08	mmu-miR-106a-5p	MIMAT0000385	YP00205061	E08	mmu-miR-210-3p	MIMAT0000267	YP00204333
A09	mmu-miR-125a-5p	MIMAT0000443	YP00204339	E09	mmu-miR-214-3p	MIMAT0000271	YP00204510
A10	mmu-miR-125b-5p	MIMAT0000423	YP00205713	E10	mmu-miR-223-3p	MIMAT0000280	YP00205986
A11	mmu-miR-126a-3p	MIMAT0000445	YP00204227	E11	mmu-miR-23b-3p	MIMAT0000125	YP02119756
A12	mmu-miR-129-5p	MIMAT0000242	YP00204534	E12	mmu-miR-26a-5p	MIMAT0000082	YP00206023
B01	mmu-miR-130a-3p	MIMAT0000425	YP00204658	F01	mmu-miR-26b-5p	MIMAT0000083	YP00204172
B02	mmu-miR-132-3p	MIMAT0000426	YP00206035	F02	mmu-miR-27a-3p	MIMAT0000084	YP00206038
B03	mmu-miR-134-5p	MIMAT0000447	YP00205989	F03	mmu-miR-27b-3p	MIMAT0000419	YP00205915
B04	mmu-miR-135a-5p	MIMAT0000428	YP00204762	F04	mmu-miR-28a-5p	MIMAT0000085	YP00204322
B05	mmu-miR-135b-5p	MIMAT0000758	YP00204130	F05	mmu-miR-298-5p	MIMAT0000376	YP00205092
B06	mmu-miR-138-5p	MIMAT0000430	YP00206078	F06	mmu-miR-299a-3p	MIMAT0004577	YP00205071
B07	mmu-miR-140-5p	MIMAT0000431	YP00204540	F07	mmu-miR-29b-3p	MIMAT0000100	YP00204679
B08	mmu-miR-142a-3p	MIMAT0000434	YP00204291	F08	mmu-miR-29c-3p	MIMAT0000681	YP00204729
B09	mmu-miR-142a-5p	MIMAT0000433	YP00204722	F09	mmu-miR-30b-5p	MIMAT0000420	YP00204765
B10	mmu-miR-145a-5p	MIMAT0000437	YP00204483	F10	mmu-miR-30c-5p	MIMAT0000244	YP00204783
B11	mmu-miR-146a-5p	MIMAT0000449	YP00204688	F11	mmu-miR-30e-5p	MIMAT0000692	YP00204714
B12	mmu-miR-146b-5p	MIMAT0003475	YP02119752	F12	mmu-miR-31-5p	MIMAT0000538	YP00205159
C01	mmu-miR-147-3p	MIMAT0004857	YP02119770	G01	mmu-miR-320-3p	MIMAT0000510	YP00206042
C02	mmu-miR-148a-3p	MIMAT0000243	YP00205867	G02	mmu-miR-325-3p	MIMAT0004640	YP00205088
C03	mmu-miR-149-5p	MIMAT0000450	YP00204321	G03	mmu-miR-335-5p	MIMAT0000765	YP02119293
C04	mmu-miR-150-5p	MIMAT0000451	YP00204660	G04	mmu-miR-34a-5p	MIMAT0000255	YP00204486
C05	mmu-miR-152-3p	MIMAT0000438	YP00204294	G05	mmu-miR-34c-5p	MIMAT0000686	YP00205659
C06	mmu-miR-155-5p	MIMAT0000165	YP02119303	G06	mmu-miR-383-5p	MIMAT0000748	YP00205000
C07	mmu-miR-15a-5p	MIMAT0000068	YP00204066	G07	mmu-miR-409-3p	MIMAT0001639	YP00204358
C08	mmu-miR-15b-5p	MIMAT0000417	YP00204243	G08	mmu-miR-451a	MIMAT0001631	YP02119305
C09	mmu-miR-16-5p	MIMAT0000069	YP00205702	G09	mmu-miR-493-3p	MIMAT0004888	YP00205087
C10	mmu-miR-181a-5p	MIMAT0000256	YP00206081	G10	mmu-miR-574-3p	MIMAT0003239	YP00206011
C11	mmu-miR-182-5p	MIMAT0000211	YP00205089	G11	mmu-miR-9-5p	MIMAT0000441	YP00204513
C12	mmu-miR-183-5p	MIMAT0000261	YP00206030	G12	mmu-miR-98-5p	MIMAT0000096	YP00204640
D01	mmu-miR-184-3p	MIMAT0000454	YP00204601	H01	cel-miR-39-3p	MIMAT0000010	YP00203952
D02	mmu-miR-185-5p	MIMAT0000455	YP00206037	H02	cel-miR-39-3p	MIMAT0000010	YP00203952
D03	mmu-miR-186-5p	MIMAT0000456	YP00206053	H03	U6 snRNA (v2)	N/A	YP02119464
D04	mmu-miR-187-3p	MIMAT0000262	YP00204018	H04	5S rRNA	N/A	YP00203906
D05	mmu-miR-18a-5p	MIMAT0000072	YP00204207	H05	RNU5G	N/A	YP00203908
D06	mmu-miR-18b-5p	MIMAT0004858	YP00205076	H06	RNU1A1	N/A	YP00203909
D07	mmu-miR-191-5p	MIMAT0000440	YP00204306	H07	UniSp2	N/A	YP00203950
D08	mmu-miR-194-5p	MIMAT0000460	YP00204080	H08	UniSp4	N/A	YP00203953
D09	mmu-miR-195a-5p	MIMAT0000461	YP00205869	H09	UniSp5	N/A	YP00203955
D10	mmu-miR-196a-5p	MIMAT0000226	YP00204386	H10	UniSp6	N/A	YP00203954
D11	mmu-miR-19a-3p	MIMAT0000073	YP00205862	H11	UniSP3	N/A	YP02119288
D12	mmu-miR-19b-3p	MIMAT0000074	YP00204450	H12	UniSP3	N/A	YP02119288

Functional Groupings

Leukemia & Lymphoma

Hodgkin's Lymphoma: mmu-miR-129-5p,mmu-miR-130a-3p,mmu-miR-132-3p,mmu-miR-134-5p,mmu-miR-135a-5p,mmu-miR-135b-5p,mmu-miR-138-5p,mmu-miR-140-5p,mmu-miR-142a-3p,mmu-miR-142a-5p,mmu-miR-145a-5p,mmu-miR-147-3p,mmu-miR-15b-5p,mmu-miR-181a-5p,mmu-miR-183-5p,mmu-miR-185-5p,mmu-miR-200a-3p,mmu-miR-205-5p,mmu-miR-20b-5p,mmu-miR-21a-5p,mmu-miR-23b-3p,mmu-miR-26a-5p,mmu-miR-26b-5p,mmu-miR-27a-3p,mmu-miR-28a-5p,mmu-miR-29b-3p,mmu-miR-30c-5p,mmu-miR-31-5p,mmu-miR-325-3p,mmu-miR-335-5p,mmu-miR-34a-5p,mmu-miR-34c-5p,mmu-miR-9-5p.

Primary Effusion Lymphoma: mmu-miR-103-3p,mmu-miR-106a-5p,mmu-miR-140-5p,mmu-miR-142a-3p,mmu-miR-148a-3p,mmu-miR-152-3p,mmu-miR-16-5p,mmu-miR-182-5p,mmu-miR-186-5p,mmu-miR-191-5p,mmu-miR-194-5p,mmu-miR-19a-3p,mmu-miR-210-3p,mmu-miR-23b-3p,mmu-miR-26a-5p,mmu-miR-29b-3p,mmu-miR-30e-5p,mmu-miR-320-3p,mmu-miR-34a-5p.

T Cell Leukemia: mmu-miR-106a-5p,mmu-miR-132-3p,mmu-miR-18b-5p,mmu-miR-19b-3p,mmu-miR-20b-5p.

Other Leukemia & Lymphoma miRNAs: mmu-miR-15a-5p.

Autoimmune Disorders

Idiopathic Thrombocytopenic Purpura: mmu-miR-196a-5p,mmu-miR-214-3p,mmu-miR-298-5p,mmu-miR-383-5p,mmu-miR-409-3p.

Systemic Lupus Erythematosus: mmu-miR-142a-3p,mmu-miR-184-3p,mmu-miR-196a-5p,mmu-miR-21a-5p,mmu-miR-298-5p,mmu-miR-383-5p,mmu-miR-409-3p.

Inflammatory Responses

IL-1 Induced Inflammatory Response: mmu-let-7g-5p,mmu-miR-146a-5p,mmu-miR-146b-5p,mmu-miR-195a-5p,mmu-miR-26b-5p,mmu-miR-299a-3p.

Inflammation Mediators: mmu-miR-155-5p,mmu-miR-203-3p.

Macrophage Inflammatory Response: mmu-miR-132-3p,mmu-miR-155-5p.

Vascular Inflammation: mmu-miR-155-5p,mmu-miR-21a-5p.

Other Inflammatory Response miRNAs: mmu-miR-125a-5p.

Innate Immune Response: mmu-miR-105,mmu-miR-146a-5p,mmu-miR-146b-5p,mmu-miR-19a-3p,mmu-miR-19b-3p,mmu-miR-299a-3p.

Induced in Monocytes by Lipopolysaccharide (LPS): mmu-let-7e-5p,mmu-miR-132-3p,mmu-miR-146a-5p,mmu-miR-146b-5p,mmu-miR-155-5p,mmu-miR-187-3p,mmu-miR-9-5p.

Immune Cells

B Cell Differentiation: mmu-miR-150-5p.

Invariant Natural Killer Cell Development: mmu-miR-150-5p,mmu-miR-155-5p.

Lymphocytes: mmu-let-7e-5p,mmu-miR-125a-5p,mmu-miR-125b-5p,mmu-miR-126a-3p,mmu-miR-142a-5p,mmu-miR-145a-5p,mmu-miR-146a-5p,mmu-miR-148a-3p,mmu-miR-195a-5p,mmu-miR-207,mmu-miR-223-3p,mmu-miR-451a,mmu-miR-493-3p,mmu-miR-574-3p.

Monocytopoiesis: mmu-miR-106a-5p,mmu-miR-20a-5p.

Natural Regulatory T Cells: mmu-miR-103-3p,mmu-miR-142a-5p,mmu-miR-149-5p,mmu-miR-150-5p,mmu-miR-15b-5p,mmu-miR-16-5p,mmu-miR-191-5p,mmu-miR-19a-3p,mmu-miR-214-3p,mmu-miR-21a-5p,mmu-miR-223-3p,mmu-miR-26a-5p,mmu-miR-27b-3p,mmu-miR-29c-3p,mmu-miR-30b-5p,mmu-miR-30c-5p,mmu-miR-30e-5p.

Targets Relevant Genes

Targets Cytokines: mmu-miR-98-5p.

Targets Interferons & Receptors: mmu-miR-146a-5p,mmu-miR-223-3p.

Targets Interleukins: mmu-miR-106a-5p,mmu-miR-146a-5p,mmu-miR-155-5p,mmu-miR-15a-5p,mmu-miR-181a-5p,mmu-miR-223-3p.

Targets STAT3: mmu-miR-18a-5p.

Targets STAT4: mmu-miR-19a-3p.

Targets STAT5: mmu-miR-19b-3p.

Targets STAT6: mmu-miR-20a-5p.

Targets TNF Alpha: mmu-miR-155-5p.

Signal Transduction

IL6 / STAT3 Signaling: mmu-let-7a-5p,mmu-let-7c-5p,mmu-let-7d-5p,mmu-miR-21a-5p.

NFκB Signaling: mmu-miR-146a-5p,mmu-miR-155-5p.

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 foward 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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