



miRCURY LNA™ Universal RT
microRNA PCR

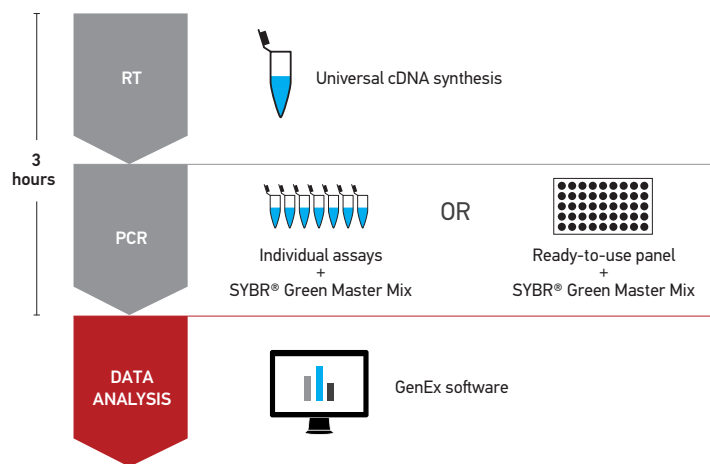
Our microRNA qPCR system combines LNA™-enhanced primers with universal RT for unmatched sensitivity and specificity with a minimum of pipetting and without the need for pre-amplification

Learn more at:

exiqon.com/mirna-pcr

EXIQON
Seek Find Verify

Take your qPCR experiments to another level:



- **Exceptional sensitivity** – Reliable quantification of individual microRNAs from as little as 1pg total RNA
- **Accurate profiling of hundreds of microRNAs** in 96- and 384-well plates using just 20ng total RNA
- **Superior specificity** – LNA™-enhanced primers enable specific quantification of microRNAs differing by a single nucleotide
- **Fast and easy** – Universal RT protocol lets you go from RNA to data in just 3 hours
- **Complete data analysis solution** with Exiqon GenEx

Get valuable tips and tricks on how to setup your experiment.

Download our microRNA qPCR guidelines:

exiqon.com/pcr-guidelines

A system specifically developed for microRNA

MicroRNAs are challenging targets because of their short sequences and high family homology. The miRCURY LNA™ Universal RT microRNA PCR system was specifically developed with this in mind. By combining high performance microRNA profiling with a fast and easy workflow, we have developed a truly unique qPCR system that offers accurate results with a minimum of pipetting and without the need for pre-amplification.

Simple and specific with less pipetting:

1 One single cDNA reaction regardless of the number of microRNAs being profiled. Use the same cDNA when shifting between single assays and plates.

First-strand synthesis (RT)
 Mature microRNA
 3' degenerate anchor
 5' universal tag

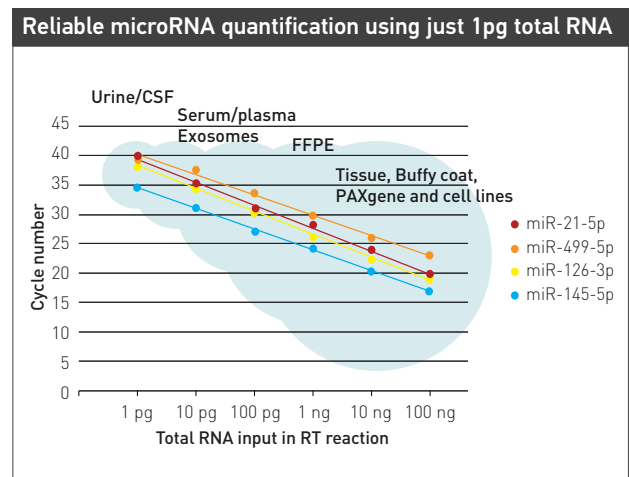
2 Two microRNA-specific primers results in market-leading specificity. LNA™-enhanced primers can be made shorter to allow both primers to fit on the microRNA enabling single nucleotide discrimination.

Real-time PCR amplification
 miR-specific forward primer
 miR-specific reverse primer

3 Three hour workflow from RNA to data, with only two hands-on laboratory steps, ensures high accuracy and throughput.

Accurate microRNA quantification using just 1pg total RNA

Use of LNA™-enhanced Tm-normalized primers enables uniform detection independent of target GC content. PCR amplification is extremely sensitive which allows accurate and reliable quantification of individual microRNAs from as little as 1 pg of total RNA in the first-strand cDNA synthesis reaction.



The ideal system for biofluids

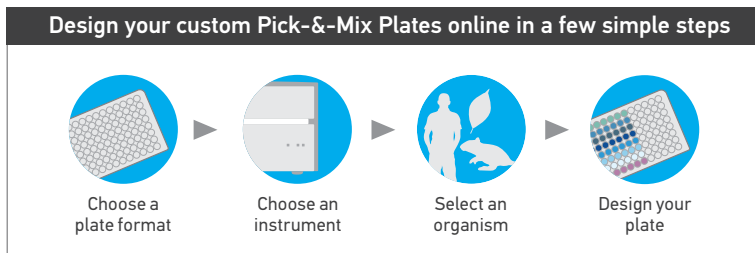
Exiqon's qPCR system builds on our extensive experience of biofluid biomarker discovery. By combining extreme sensitivity and specificity with a universal RT step without the need for pre-amplification, we have developed a fast and accurate system for profiling serum, plasma, exosomes, urine and other liquid biopsies.

miRQC: Best combination of sensitivity and specificity

In a 2014 Nature Methods paper, Mestdagh *et al.* present the results of the miRQC study which compares 12 microRNA expression profiling platforms in four key areas. Exiqon's system offers the best combination of sensitivity and specificity. Find out more: exiqon.com/mirqc

Customize your own microRNA qPCR plates

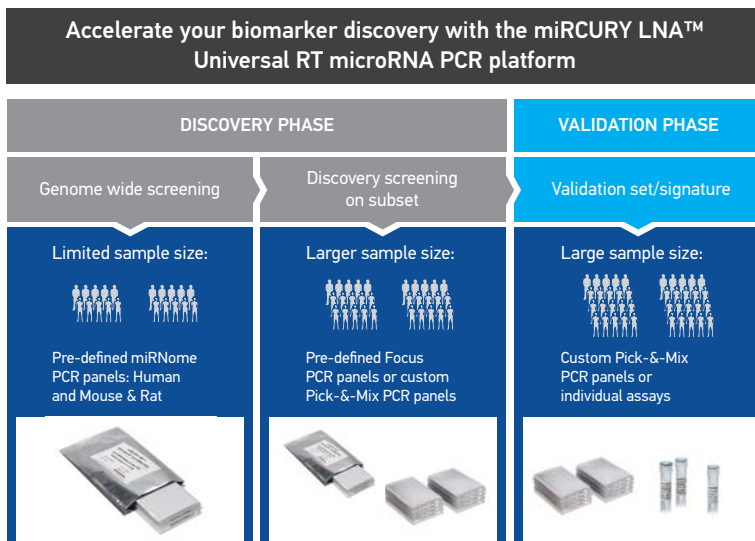
Pick-&-Mix qPCR plates can be customized to the actual experiment, whether it is a broad screen with hundreds of assays per sample or a very focused validation with a few assays per sample, allowing for a very high throughput.



Accelerate your biomarker discovery with the miRCURY LNA™ qPCR platform

Exiqon's microRNA qPCR product portfolio has been designed with biomarker discovery in mind. We use the products in our own diagnostic discovery department for developing various microRNA-based tests for colorectal and prostate cancer.

In this work, we generally perform an initial broad profiling using miRNome panels, to define our hypothesis before moving to custom Pick-&-Mix qPCR panels where we do focused screening and validation experiments on a larger sample set.



A cost effective introduction to the most sensitive microRNA qPCR system available. Contains everything you need to perform small scale experiments.

Get started now with the miRCURY LNA™ Universal RT microRNA PCR Starter Kit:

exiqon.com/mirna-pcr-starter-kit



Universal cDNA synthesis

Simple and fast experimental procedure

The use of a single RT reaction independent of the number of microRNAs being profiled ensures a simple and fast experimental procedure. Fewer pipetting steps means a more convenient workflow with less variation and lower sample input.

The Universal cDNA kit is designed to reverse transcribe all microRNAs from most sample sources. Combined with Exiqon's qPCR system, this allows you to use the same cDNA preparation regardless of whether you are working with single reactions or PCR plates.

For added convenience and control of your experiments, we offer an RNA spike-in kit designed for quality control of any step in a qPCR experiment: from sample isolation and cDNA synthesis to PCR amplification.

miRcURY LNA™ primers

Flexible assay formats to fit your project

Exiqon's LNA™-enhanced primers are available in many different formats to fit your needs, whether you are looking for individual assays or large-scale PCR panels.

All primers have been designed to ensure that they offer excellent performance with low background signal.

Exiqon's PCR panels are ready-to-use; just add cDNA and SYBR® Green Master Mix. In addition, they include relevant controls, reference genes and interplate calibrators for added convenience.

Individual assays

- 1,400 wet lab validated primer sets
- 20,000 *in silico* validated primer sets
- Custom assays for novel microRNAs
- Available in individual tubes or bulk plates

Focus panels

- Collections of panels for the study of specific biological areas or diseases: e.g. serum/plasma, cancer, toxicology and exosomes
- Available in 96 and 384 well formats

miRNome panels

- Targets 752 of the most highly expressed microRNAs
- Profiling from 40ng total RNA

Pick-&-Mix custom panels

- Design your own ready-to-use panels using our online tool
- Choose from validated or custom assays
- Ideal for targeted research or validation

ExiLENT Master Mix

High performance master mix

ExiLENT Master Mix contains all reagents needed for quantitative real-time PCR amplification. The SYBR® Green based master mix has been optimized for use with Exiqon's LNA™-enhanced qPCR assays.

It minimizes non-specific amplification and ensures class leading sensitivity and specificity.

Nobody knows our PCR system as well as we do. Let Exiqon services perform your microRNA qPCR experiments.

Learn more at:

exiqon.com/microRNA-pcr-services

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