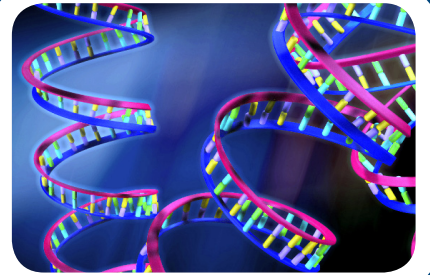


# qScript™ microRNA Quantification System

**DETECT AND QUANTIFY microRNAs WITH SUPERIOR SENSITIVITY**

**Quanta's miRNA profiling system includes the most sensitive and accurate kits and assays for RT-qPCR of microRNA signatures.**



**Quanta**  
BIOSCIENCES™

## FEATURES AND BENEFITS

- Detect microRNAs with log-fold greater sensitivity than currently available systems
- Profile many microRNAs from the same cDNA sample
- Integrated system includes positive control and does not require expensive hydrolysis probes
- Broad dynamic range of RNA input
- Profile *your* targets – hundreds of microRNA assays available and growing at [www.quantabio.com/mirna](http://www.quantabio.com/mirna)

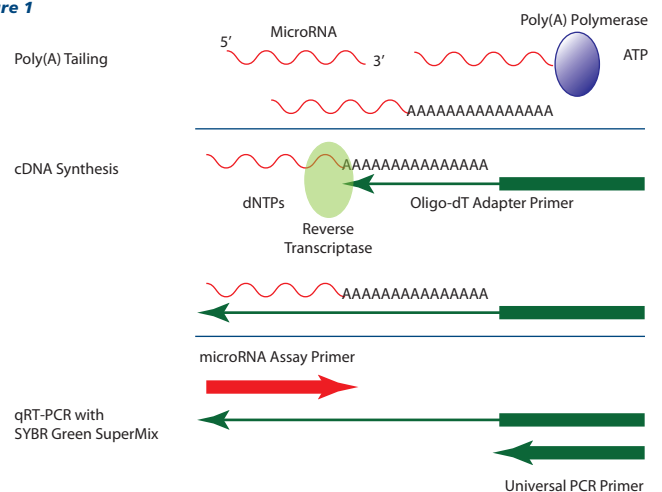
## QUANTA microRNA Technology

The qScript microRNA cDNA Synthesis Kit may be used with total RNA or preparations pre-enriched for miRNAs. First a poly(A) tail is added to miRNAs followed by cDNA synthesis using an adapter primer and qScript RT in a single-tube reaction. The resulting cDNA is ready for qPCR amplification with our Universal PCR Primer and your choice of miRNA assays. This unique single-tube system provides ease-of-use and accurate quantification of microRNAs with a high degree of sensitivity and specificity (Figure 1). PerfeCra™ SYBR Green SuperMixes ensure compatibility with any real-time thermal cycler.

## CONFIDENCE IN YOUR RESULTS

Quanta's technology allows inclusion of a minus-poly(A) polymerase control not available with other protocols. The minus-PAP control provides confidence in detection of low-abundance miRNAs, giving you reliable results. Each kit also includes a positive control for SNORD44 that may also be used as a calibration target. Several additional small RNA control assays are available at [quantabio.com/mirna](http://quantabio.com/mirna)

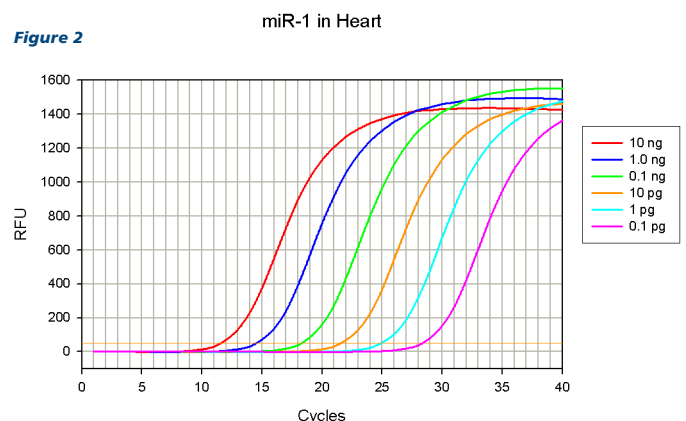
**Figure 1**



## DETECTION OF RARE microRNAs

QUANTA's microRNA profiling system provides linear detection and quantification of miRNAs across total-RNA input levels spanning six orders of magnitude (Figure 2). This means miRNAs will be detected when even when tissue is scarce or the miRNAs are rare. The Quanta miRNA system will detect low copy miRNAs more reliably than other systems and due to the minus-PAP control you will have confidence in the results.

**Figure 2**



## SUPERIOR SENSITIVITY

QUANTA's miRNA Profiling System yields superior results when compared to other leading miRNA quantification systems (Figure 3). The qScript microRNA cDNA Synthesis Kit, PerfeCra microRNA-specific assays and PerfeCra SYBR Green SuperMix form an integrated system that yields industry-leading results.

## PerfeCra microRNA-SPECIFIC ASSAYS & CONTROLS

QUANTA's PerfeCra microRNA assays are lab-validated SYBR green assays and are specific to the miRNA sequences in miRbase. Each consists of a single miRNA-specific primer (Figure 1) that works in conjunction with the Universal PCR Primer to form a robust and specific assay. The up-to-date list of assays validated and available can be found at [www.quantabio.com/mirna](http://www.quantabio.com/mirna). Each qScript microRNA cDNA Synthesis Kit contains both the Universal PCR Primer and Positive Control Primer, which are also available individually (Table 1).

## ACCURATE PROFILING IN ANY TISSUE TYPE

The qScript microRNA Quantification System accurately detects present miRNAs in any tissue type with correlation to established values (Figure 4). Relative abundance of miRNAs is established using any of several small RNA controls as reference points. This makes miRNA profiling amongst different samples and tissue types straightforward. Visit [www.quantabio.com/mirna](http://www.quantabio.com/mirna) today to browse available assays and learn more about the qScript microRNA Quantification System.

Figure 3

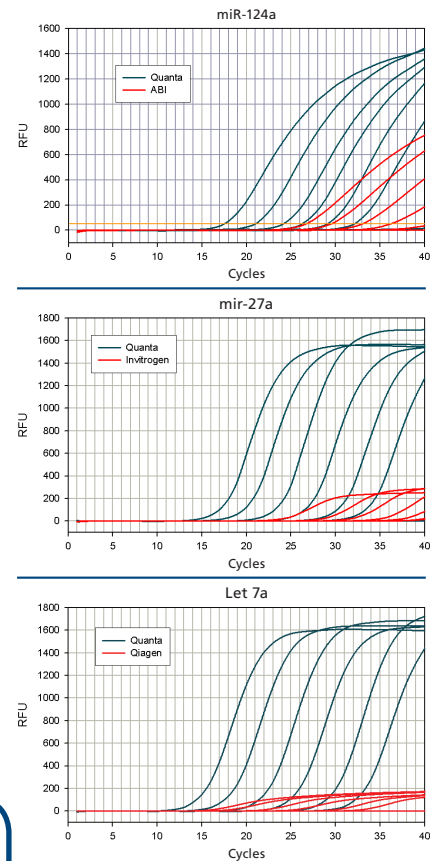
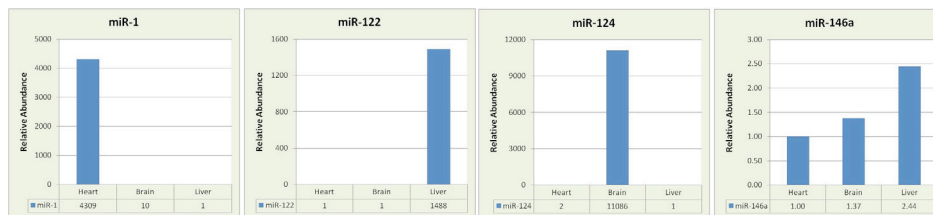


Figure 4  
Relative Abundance of MicroRNAs in Human Tissues



## ORDERING INFORMATION

PRODUCT	Quanta Cat. No.	Pack Size
<b>qScript microRNA cDNA Synthesis Kit</b>	95107-025	25 rxn
	95107-100	100 rxn
<b>PerfeCra microRNA-Specific Assay</b>	See <a href="http://www.quantabio.com/mirna">www.quantabio.com/mirna</a>	500 assays
<b>PerfeCra Universal microRNA Primer</b>	95109-250	250 x 50uL assays
<b>PerfeCra Control Small RNA Primer</b>	Various: <a href="http://www.quantabio.com/mirna">www.quantabio.com/mirna</a>	250 x 50uL assays
<b>PerfeCra SYBR Green SuperMix</b>	95054-100	100 x 50uL rxn
	95054-500	500 x 50uL rxn
	95054-02K	2000 x 50uL rxn

PRODUCT	Quanta Cat. No.	Pack Size
<b>PerfeCra SYBR Green SuperMix ROX</b> (for all ABI platforms except 7500)	95055-100	100 x 50uL rxn
	95055-500	500 x 50uL rxn
	95055-02K	2000 x 50uL rxn
<b>PerfeCra SYBR Green SuperMix Low-ROX</b> (for ABI 7500)	95056-100	100 x 50uL rxn
	95056-500	500 x 50uL rxn
	95056-02K	2000 x 50uL rxn
<b>PerfeCra SYBR Green SuperMix for iQ</b> (for Bio-Rad iCycler)	95053-100	100 x 50uL rxn
	95053-500	500 x 50uL rxn
	95053-02K	2000 x 50uL rxn

[www.quantabio.com/mirna](http://www.quantabio.com/mirna)