

miExpress™ Precursor miRNA Expression Clones

Validated All-in-One miRNA qPCR primers get the job done.

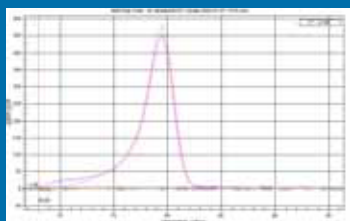
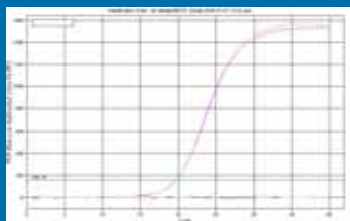


Figure 2. All-in-One miRNA qPCR primers are validated to generate a single amplification of the correct size for the targeted miRNA and to yield a single dissociation curve peak. A cDNA pool, containing reverse transcribed products from 10 human tissue total RNA samples was used as the validation template. qPCR was performed using 0.2 μM primer with 2× All-in-One qPCR Mix. The upper panel shows a validated result for melting curve with the lower showing validated result for amplification curve.

Complete

miExpress™ precursor miRNA expression clones are available in non-viral and viral-based vector systems allowing stable or transient transduction of miRNA into virtually all cell types including difficult-to-transfect and non-dividing cells.

- ◆ miExpress miRNA clone libraries cover all known human, mouse and rat miRNAs available in the miRBase database.
- ◆ All clones are fully sequenced.
- ◆ Optimization of expression cassettes allows high expression of precursor miRNA and the maturation of miRNA inside cells.
- ◆ Expression cassettes of all miRNA expression constructs are completely sequenced.
- ◆ Lentiviral-based expression constructs allow efficient transduction of miRNA into non-dividing and difficult-to-transfect target cells.
- ◆ A neomycin or puromycin selection marker enables regulation studies of both long-term and transient expression.
- ◆ Transduction efficiencies are monitored with fluorescent reporter protein.

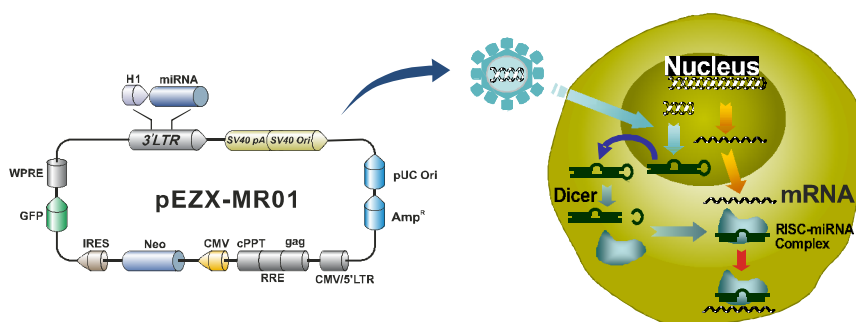


Figure 3. Precursor miRNA constructs expressed with a lentiviral-based vector and their involvement in vector-mediated miRNA gene regulation.