microRNA
Brilliant solution for microRNA biomarkers
microRNAs Orchestrate the Biological Function of Cells and Tissues

microRNAs (miRNAs) are small non-coding RNA molecules that regulate gene translation through silencing or degradation of target mRNAs. A typical miRNA is processed from a long primary RNA sequence to a short mature functional transcript around 22 nucleotides in length. A common characteristic of a miRNA is its ability to pleiotropically target potentially hundreds or even thousands of genes, and some function in an organ- or cell-specific manner. miRNAs influence a wide range of major biological processes including differentiation, proliferation, metabolism, apoptosis or inflammation. Deregulation of miRNA levels within cells is associated with various diseases, so they have an immense potential to serve as diagnostic or prognostic biomarkers. However, accurate quantification of miRNAs is technically challenging due to their high degree of homology, small size, and low concentration in circulation. Therefore, there is a need for a reliable miRNA detection platform that could be used routinely in laboratories. Typical miRNA-associated project workflow is rather complex and all steps must be planned thoroughly.

miRNA Biomarker advantages

- Liquid biopsy: Actively secreted into circulation
- Disease relevance: Onset and progression of many diseases are associated with changes in miRNA levels
- Therapy response prediction: miRNAs are involved in disease pathways
- Cell/tissue-specific miRNA pattern: Link of serum or plasma profiles to specific organs, tissues, and cell types
- Translation of findings from animal models to humans: Enabled by the high degree of sequence conservation across species
- High stability: miRNAs are preserved from degradation in plasma/serum samples. Deep-frozen samples enable a retrospective analysis

Brilliant Solution for microRNA Biomarkers

Helping in all steps of your miRNA project. In both clinical and research laboratory.

SAMPLE COLLECTION
- Collection tubes
  - Liquid biopsy samples
  - Tissue samples
  - Cell culture samples

ISOLATION
- RNA isolation kits
  - Cell cultures, tissues, whole blood, PBMC
  - Serum, plasma
  - Exosomes

TARGET SCREENING
- MiRXES miRNA panels
  - Knowledge panels up-to 400 miRNAs
  - Custom panels for all miRNA targets

IMMUNOASSAY VALIDATION
- miREIA kits
  - Absolute quantification
  - High reproducibility
  - Fast

qPCR VALIDATION
- MiRXES ID3EAL kits
  - Two-tailed RT-qPCR kits
  - High sensitivity
  - Low sample volume
  - Multiplexing
  - Customization

CLINICAL DIAGNOSTICS
- osteomiR
- thrombomiR
  - All-in-one RT-qPCR panels
  - Normalization controls included
  - Evaluation software included

SERVICES
- Custom miREIA kits
- Custom Two-Tailed RT-qPCR kits
- Analytical services
  - Using miREIA immunoassays
  - Using RT-qPCR kits and panels
miRNA Measurement Service

Making miRNA measurements available to any researcher.

BioVendor addresses scientists who cannot perform miRNA determinations in their own labs either due to lack of experience, qualified staff or laboratory equipment.

The service is the best opportunity for research teams to generate pilot data convincing them about the miRNA detection tools provided by BioVendor as well as showing miRNAs as meaningful biomarkers within their projects.

Moreover, no investment is needed.

We offer

- Determination or quantification of individual miRNAs as well as miRNA panels in various client’s samples
- A complete spectrum of analytical methods listed in this booklet according to client needs (miREIA, RT-qPCR Assay kits, RT-qPCR Knowledge panels, osteomiR, thrombomiR)
- Sample RNA isolation (optional)
- Specification of the study
- Correct sample collection and pretreatment consulting
- Normalization method (controls) consulting
- Analysis performed in a fully equipped laboratory with staff skilled in miRNA quantitation methods
- Project supervised by experts experienced in miRNA project planning

Contact Information

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