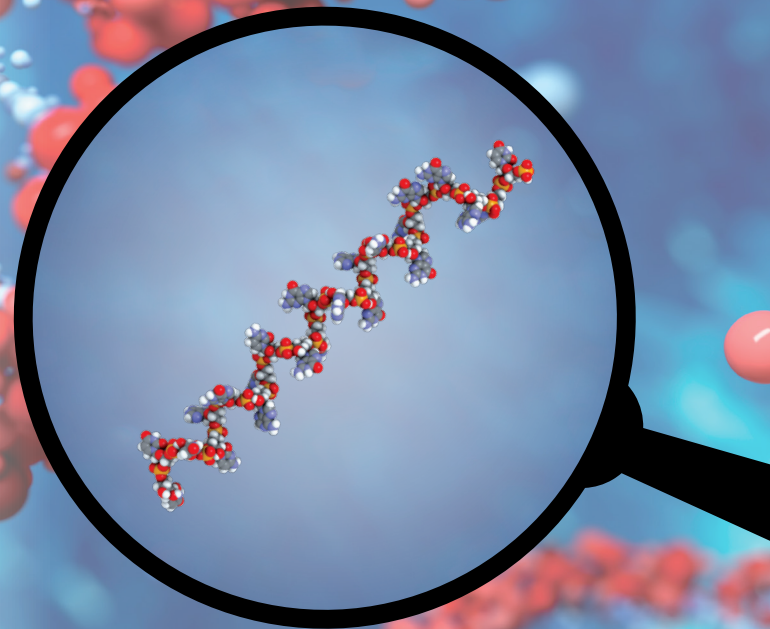


# miRNA quantification

*using combination of DNA/miRNA hybridization and immunoassay*

**NEW TECHNOLOGY**

- **Quantitative method of miRNA detection**
- **Analytical specificity of 99.4%**
- **Limit of detection at least 0.13 amol/ $\mu$ l**
- **Great correlation with qRT-PCR method (>90%)**
- **No amplification steps needed**
- **Time to result < 3 hr (including purification and miRNA profiling)**

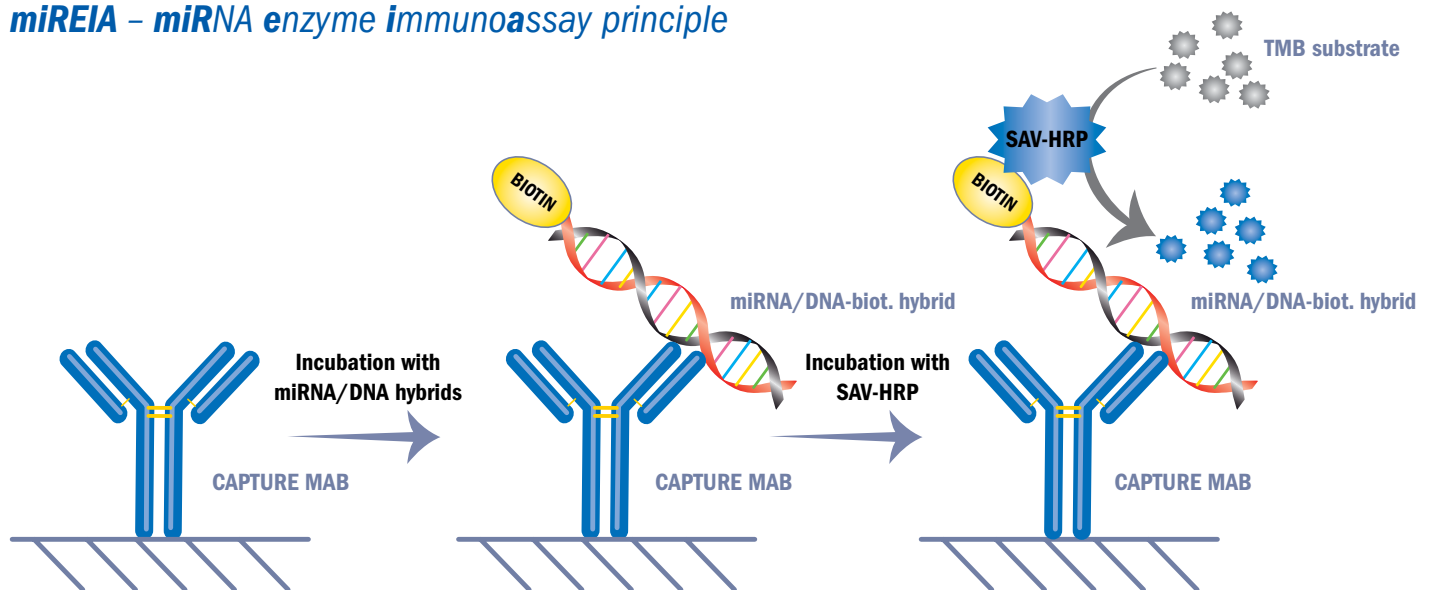


**Breakthrough technology enabling easy use of miRNA biomarkers in both clinical and laboratory settings.**

## miRia – miRNA immunoassay

**Approach involves hybridization of miRNA isolated from patient sample to complementary biotinylated DNA oligonucleotide probe followed by monoclonal antibody detection of perfectly matched DNA/miRNA hybrids with colorimetric (miREIA – miRNA enzyme immunoassay) or chemiluminescent (miRacle – miRNA antibody/capture luminometry) visualization.**

### miREIA – miRNA enzyme immunoassay principle



The biotin-labeled specific DNA oligonucleotide is hybridized with isolated miRNA from blood sample. The DNA/RNA hybrids are then transferred onto a stationary solid phase coated with monoclonal antibody specific to perfectly matched RNA/DNA-biotin hybrids. Washed solid phase is then incubated with streptavidin-HRP conjugate and visualized by chromogenic substrate ~ 3,3',5,5'-tetramethylbenzidine (TMB). The absorbance is proportional to the concentration of specific miRNA species present in the blood sample.

## Contact Information

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