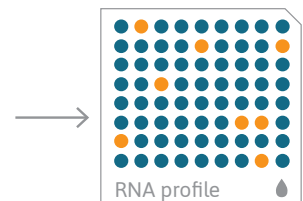
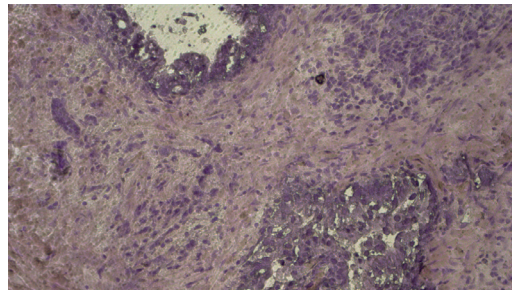
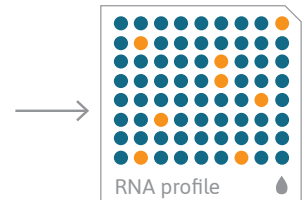
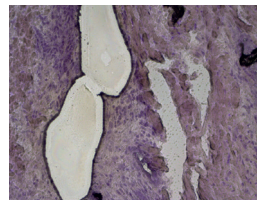


Cell-type specific microRNA/mRNA analysis in complex tissues

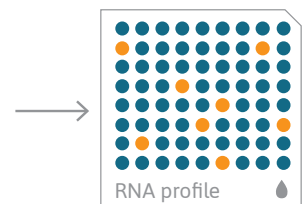
Pancreatic Ductal Adenocarcinoma (PDAC)



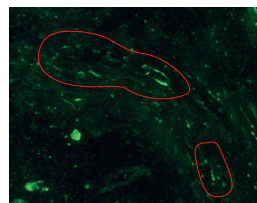
Tumor tissue (TT)



Stromal tissue (ST)



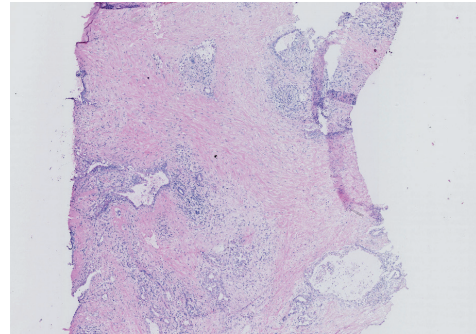
Tumor vessels (TEC)



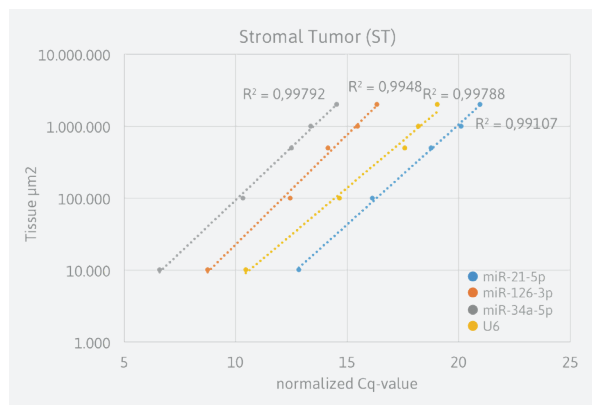
Healthy and malignant tissues are mixtures of multiple cell types:

1. Tumor cells
2. Stromal cells
3. Microvasculature – mainly endothelial cells
4. Other specialized cell types
(e.g., Tumor Infiltrating Lymphocytes)

Compartmentalization of tissue to disentangle tissue heterogeneity and sensitive analytical methods are essential to obtain interpretable results from tissue analysis.



Pancreas Ductal Adenocarcinoma (PDAC)

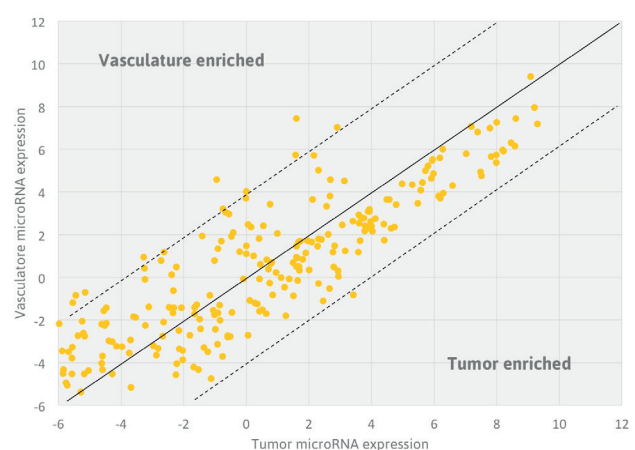
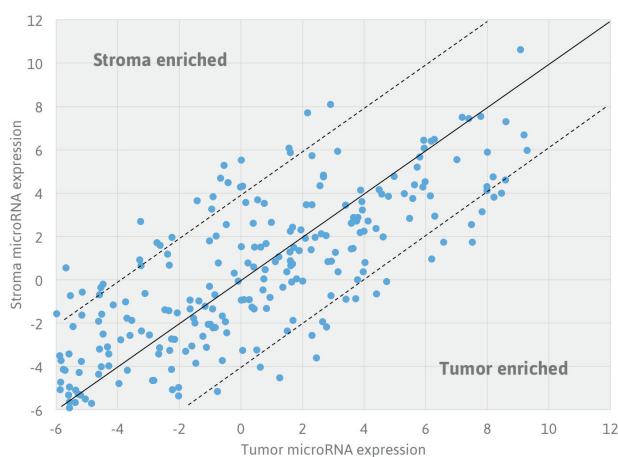


How low can we go?

We can isolate high quality RNA successfully even from small (1×10^4 – $2 \times 10^6 \mu\text{m}^2$) tissue samples

Using this protocol we have demonstrated:

- a profound difference in RNA expression signatures between whole tumor and subsets of cell types within the tumor and
- large heterogeneity in RNA expression signatures between tumor, stroma and tumor endothelial cells*.



* Note: the technology can be utilized for almost any tumor tissue sample.

Vivomicx



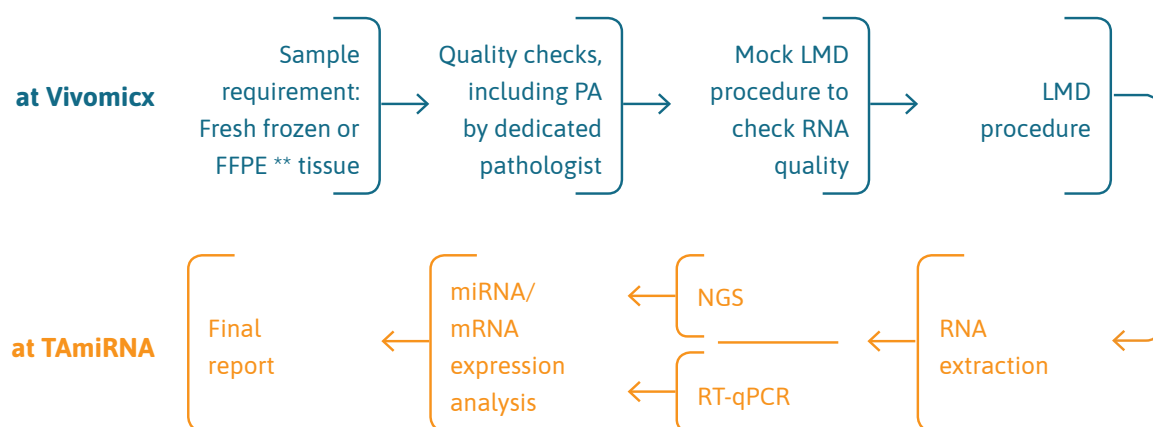
TAmiRNA

has developed validated protocols to process preclinical and clinical tissue samples using Laser Microdissection (LMD)

offers high quality RNA services performed by experts:

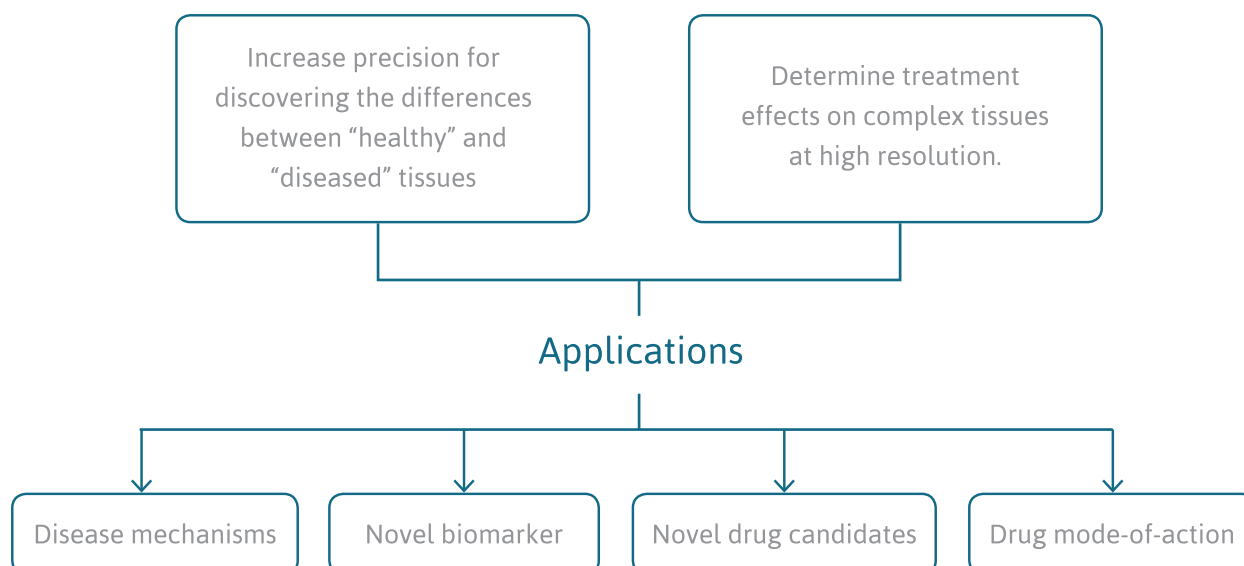
- targeted microRNA and mRNA analysis (RT-qPCR)
- microRNA screening (RT-qPCR and NGS)

Workflow



** For FFPE samples – please contact us!

LMD & RNA expression analyses enables to:





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