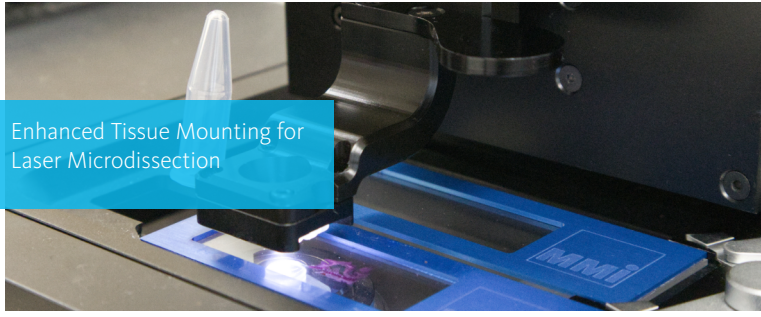
Data Sheet

Sticky Slides – Mount & Cut



High Stickiness – Easy Tissue Mounting

MMI Sticky Slides are specifically designed membrane slides with an increased hydrophobicity membrane to improve tissue adhesion for laser microdissection workflows. The surface property makes mounting tissue easier which enables further accuracy and peace of mind when isolating ROIs from samples using the laser microdissection (LMD) system, the MMI CellCut.

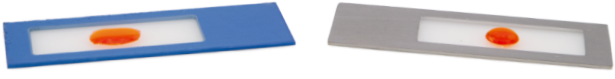


Fig. 1: Comparison of hydrophobicity between MMI Sticky Slides and conventional membrane slides. Each slide was pipetted with 100 µL of stained bidistilled water, clearly demonstrating the differences in surface wetting. The higher hydrophobicity of the Sticky Slides makes it easier to mount tissue samples.

Flat Membrane Design for Reliable Imaging

MMI Sticky Slides feature a flatter metal frame that keeps the membrane more planar than conventional membrane slides. When a slide is not completely flat, tissue can drift out of focus during imaging. With MMI Sticky Slides, the membrane remains consistently flat, keeping tissue samples in focus and ensuring reliable, high-quality image acquisition and tissue cutting.

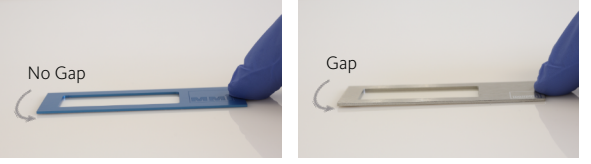


Fig. 2: Comparison of planarity between Sticky Slides and conventional membrane slides. The metal frame of the Sticky Slides ensures the membrane remains completely flat, keeping the tissue in focus during imaging.

One Slide for All Stains

Sticky Slides are suitable for all common staining techniques, including Hematoxylin and Eosin (H&E), immunohistochemistry, and immunofluorescence. In addition, FFPE material can be deparaffinized without difficulty. The slides can then be processed with alcohols and xylene, as required for standard histological and immunological protocols.

Fig. 3: Sticky Slides with FFPE tissue after H&E staining, undergoing ethanol treatment.

Autoclaving and Tissue Storage

Fig. 4: Sticky Slides are fully compatible with standard autoclaving procedures.

Sticky Slides are fully compatible with standard autoclaving procedures and can be safely used at temperatures up to 134 °C at 2 bar pressure. Additionally, these slides allow for reliable long-term storage of tissue samples at -80 °C without compromising tissue integrity, providing flexibility for downstream analysis.

Contamination-Free Laser Microdissection

Using MMI Sticky Slides, LMD can be performed without risk of contamination. The tissue is sectioned onto the flat side of the slide. For LMD, the slide is then flipped and placed in a sandwich-like setup on a glass slide. This approach ensures that the tissue remains protected from contamination throughout the entire process, ensuring sample integrity and reliable downstream analysis.

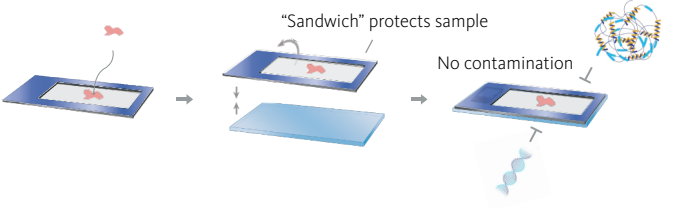


Fig. 5: Contamination-free LMD. The tissue is positioned between the membrane and a glass slide, preventing any particles from coming into contact with the sample.

How to Mount Tissue on the Sticky Slides

When preparing tissue samples on Sticky Slides, it is essential to mount the tissue on the flat side of the slide, which is the side without the MMI logo. Mounting tissue on the incorrect side (the side with the logo), can significantly reduce the efficiency of LMD.

Fig. 5: Tissue must be mounted on the flat side of the slide (without the MMI logo) for optimal LMD performance

The tissue on the Sticky Slides should ideally be mounted approximately 3 mm away from the metal frame. This ensures smooth and reliable isolation.

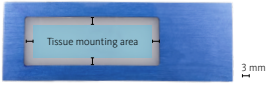


Fig. 6: Area on the Sticky Slide for tissue mounting.

Order Information

Item	Membrane	Pack size	Order code
MMI Sticky Slides	PET membrane (1.4 µm)	50 slides	[50123]
MMI Sticky Slides RNAse free	PET membrane (1.4 µm)	50 slides	[50122]

Webshop for orders

shop.molecular-machines.com

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