Leica Laser Microdissection Application Note

Laser Microdissection of Tooth Tissue
Comfortable Laser Microdissection of Unstained Tooth Tissue

The new Leica LMD6000 system is equipped with the powerful 355 nm diode laser. Due to this, even hard tissues like bones or plants can be easily dissected. The microdissection of the unstained frozen specimen of mouse tooth is shown. LMD6000 is able to dissect even hard parts of tooth like enamel or dentin.

Unfixed, non de-ashed frozen specimen from mouse upper jaw molar (8 weeks old). Frozen material was cut into 6 µm sections with a tungsten knife (16 cm • C sword) in the cryostat CM1900 (Leica Microsystems). Laser microdissection was performed with the unstained specimen.

A. General view of mouse tooth section
B. Microdissected tooth section where parts of enamel, dentin, and cement were cut
C and D. Magnification of cement tissue from the square box of image B.

The dissection of the section boundary of cement and the periodontal membrane are seen.

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