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Laser Capture Microdissection

National Cancer Institute

Source

National Cancer Institute. *Laser Capture Microdissection*. NCI Thesaurus. Code C19263.

Laser capture microdissection is a new technology developed in the Intramural Program to allow sampling of specific cells under direct microscopic visualization by a pathologist. A film is placed against the heterogeneous tissue and activated by a laser beam to capture only the cells of interest. Those cells are transferred to the film to provide a visual microscopic record of what was transferred, which can be analyzed for DNA, RNA, or protein. The film upon which the cells are transferred is incorporated into the cap of a vial so that, when the transfer is done under a routine microscopic visualization, the microdissected material can immediately be put into a vial for processing. The system is integrated into a pathologist's microscope so that the cells are microdissected, transferred to the cap, and then rotated into a vial by a rotating arm in a hands-off operation. (from Cancer Genome Anatomy Project (CGAP) Update)