

Feb.
2004

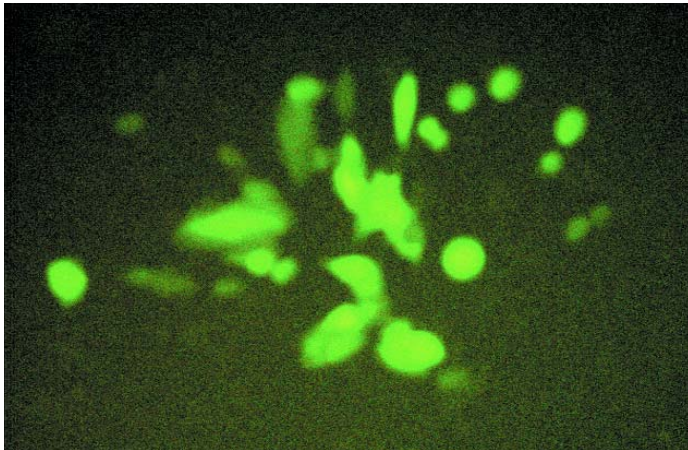
Leica Laser Microdissection
Application Note

A vertical strip on the left side of the page contains three stacked microscopy images. The top image shows a dense field of green fluorescent cells. The middle image shows the same field with red outlines around individual cells, indicating they have been identified for microdissection. The bottom image shows the same field with a dark background, where the green outlines of the cells remain, representing the result of laser microdissection.

reSOLUTION

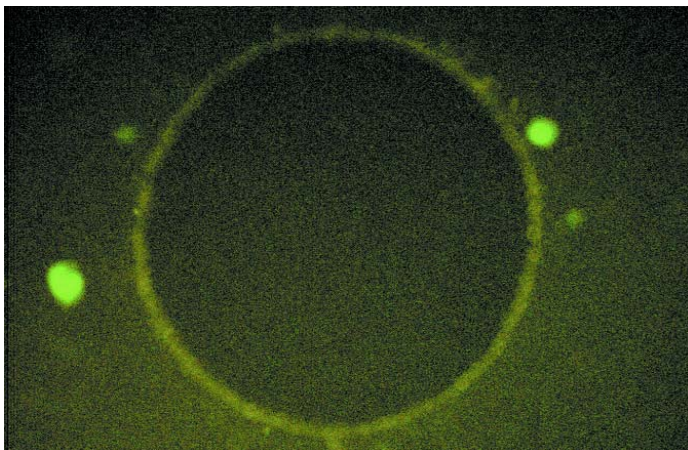
Live Cell Cutting

Isolation of Cells Infected with HCM Viruses



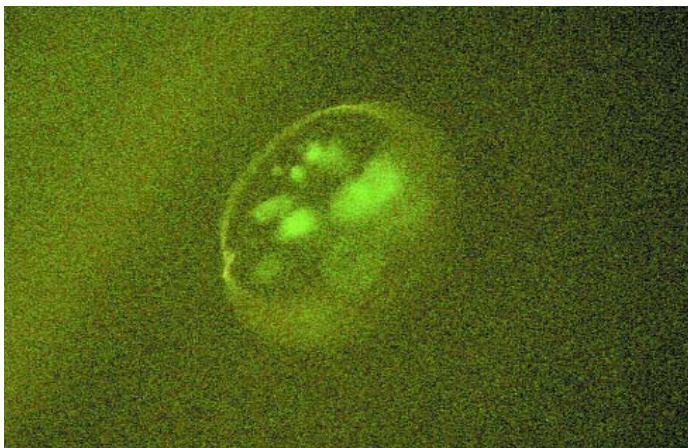
Specimen

Human foreskin fibroblasts, infected with GFP-labeled HCMV (Human Cytomegalovirus)



Cell Culture

Cell culture was infected with the supernatant of the mixture of wild-type non GFP-labelled HCMV and mutant HCMV labelled with GFP and incubated in the membrane Petri dish. On the second day, fibroblasts infected with mutant HCMV (GFP-labelled) were dissected using Leica LMD laser microdissection system with LCC software module. 20x objective and I3 filter cube were used.



Microdissection of HFF;
infected with the HCMV mutant

Isolation/Amplification:

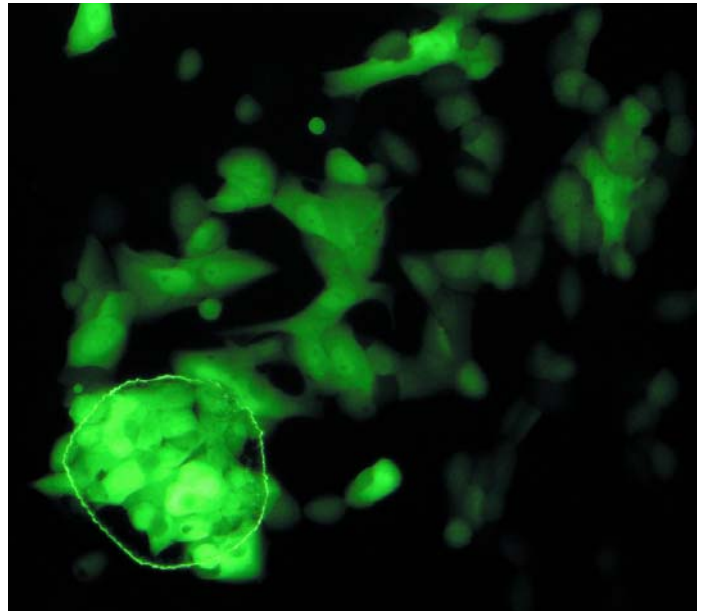
Reculturing of isolated cells with fresh fibroblasts.

Analysis:

Fluorescence microscopy; reculturing after selection by LMD was successful.

Target:

Selection of a newly generated green fluorescent HCMV mutant.



Microdissected cells were re-cultured with fresh fibroblasts. The image shows newly generated GFP-labelled HCMV mutant.

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