

Equipment name

Leica Fluorescence Microscope

**Category**

D. In-vitro toxicity studies

Institute

NILU, Norwegian Institute for Air Research

Localization

Health effect Laboratory , Norwegian Institute for Air Research (NILU), Kjeller 2007, Norway

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Short technology description/ Overview

The Leica DMI3000 research microscope is useful tool supports all transmitted light methods including fluorescence, live cell, time-lapse imaging, high-speed multi-fluorescence optical sectioning, micromanipulation, and more.

The viewing angle of the ergonomic tube, a standard feature, can be continuously adjusted to ensure the most comfort for the user.

Perceptive Image analysis software and CCD camera

Technical Specification

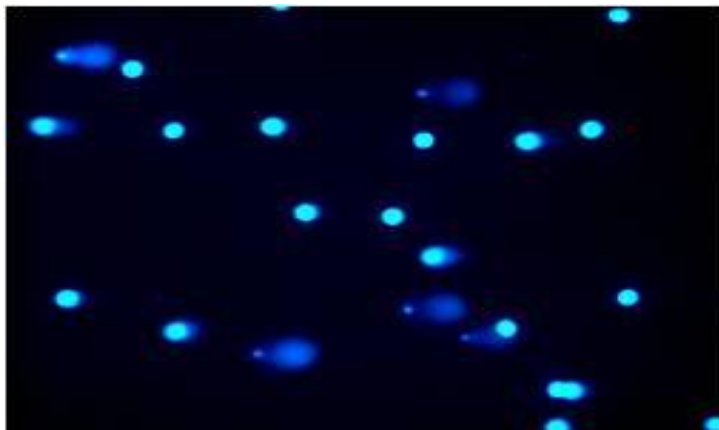
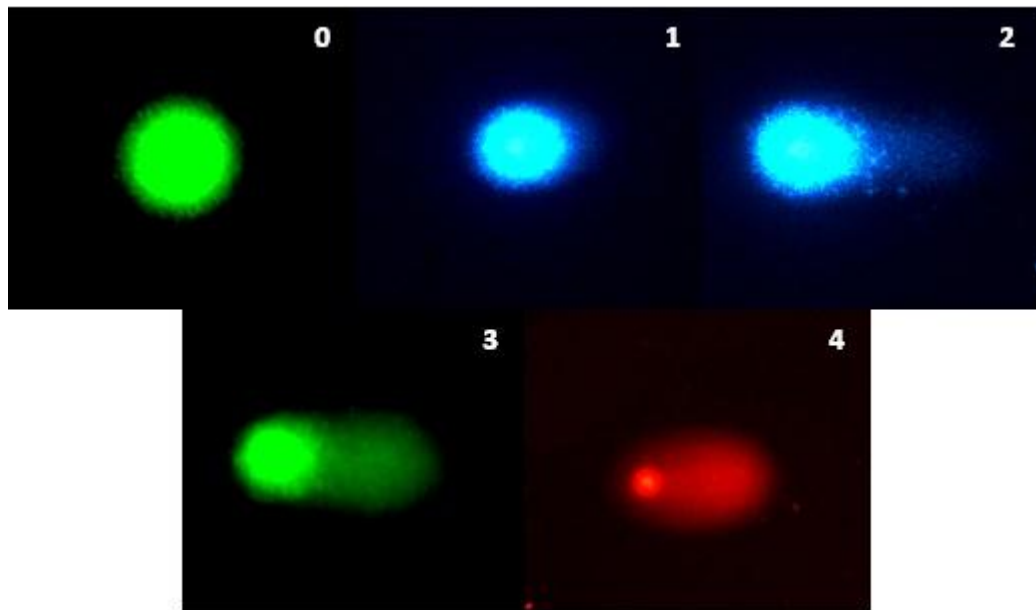
- Comet assay - analyzing of DNA damage
- Micronucleus assay – analyzing of chromosomal damage
- Analyzing of morphology of cells (size, shape)

Main Features

- Special software for scoring DNA damage
- Different filters for different kind of dyes.
- Switching between optical and florescent mode

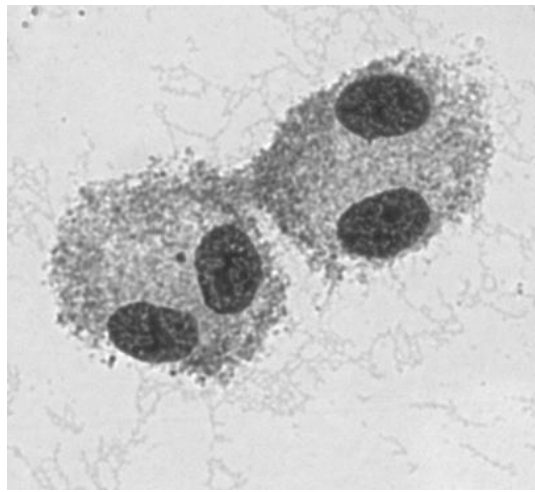
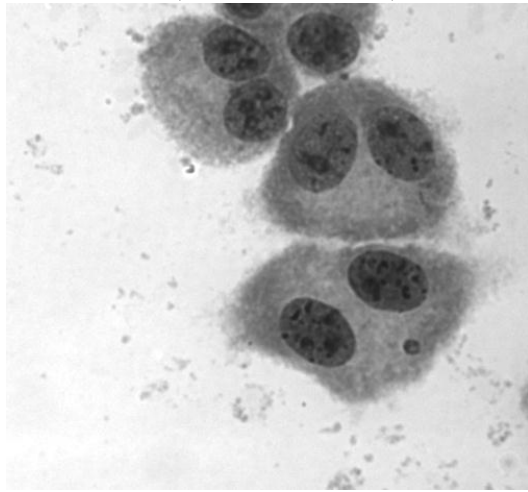
Typical samples and images

Comet assay: Different levels of DNA damage

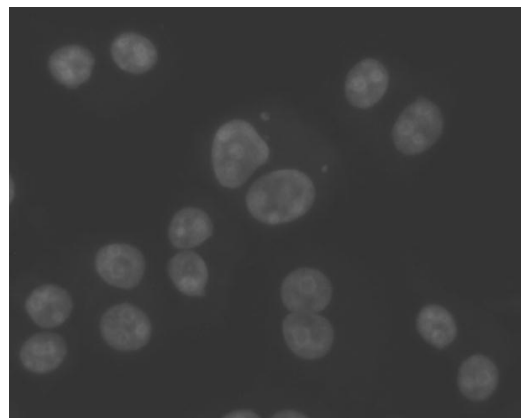
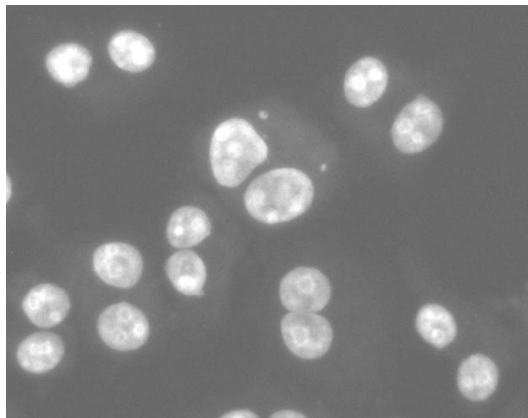


Micronucleus assay

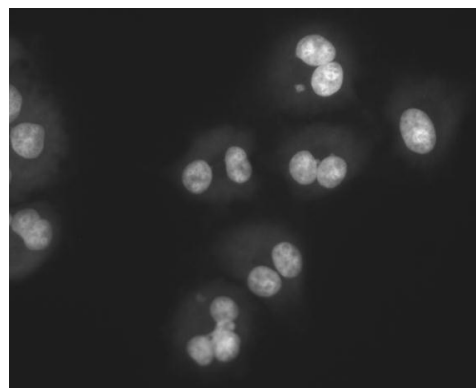
MN Cos cells, Giemsa stained,



MN Cos cells, DAPI stained



MN Cos cells
Combined staining with DAPI + Acridine orange



Other information