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Single Cell Gel Electrophoresis

National Cancer Institute

Source

National Cancer Institute. *Single Cell Gel Electrophoresis*. NCI Thesaurus. Code C96515.

A rapid, simple, visual and sensitive technique for measuring DNA breakage in individual mammalian cells in response to a test agent. A cell is immobilized in agarose and made permeable and the broken DNA migrates out under the influence of the electric field. A damaged cell has the appearance of a comet with a brightly fluorescent cell body and a tail whose length and fluorescence intensity are related to the number of DNA-strand breaks induced by the test agent.