Comet SCGE assay kit

Fast and simple electrophoresis method to measure DNA fragmentation

Exposure of cells to oxidative and environmental stresses frequently results in the breakdown or oxidation of genomic DNA. Assays to evaluate the integrity of genomic DNA, or to assess the presence of oxidized DNA are frequently used as a means of verifying the onset of apoptosis or DNA damage. The Comet SCGE Assay measures DNA damage by fluorescently detecting the integrity of DNA liberated from cells embedded in low melting point agarose. Upon electrophoresis, fragmented DNA produces a characteristic "comet" shaped tail as small DNA fragments migrate in the gel more rapidly than in-tact genomic DNA. The Comet SCGE Assay is a fast and simple electrophoresis method to detect and quantitate DNA fragmentation in cells associated with DNA damage and apoptosis. A unique nucleic acid stain, CYGREEN® Nucleic acid dye, provides improved sensitivity for DNA visualization compared to ethidium bromide.

Citations: 50 View Online »

Ordering Information

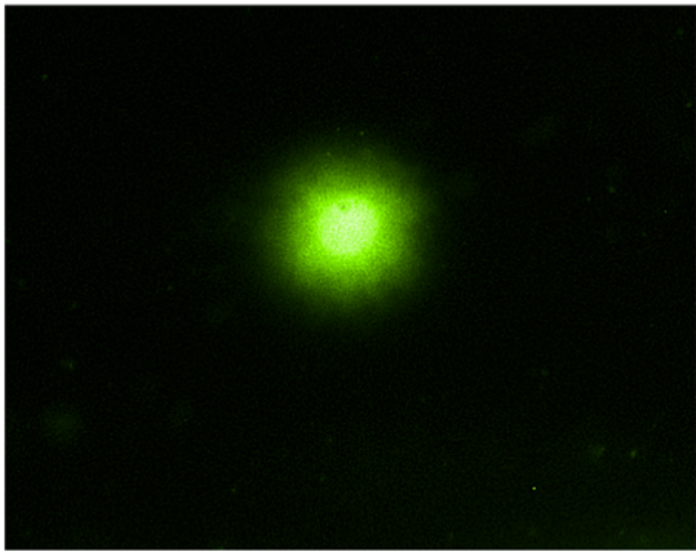
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ADI-900-166	50 tests

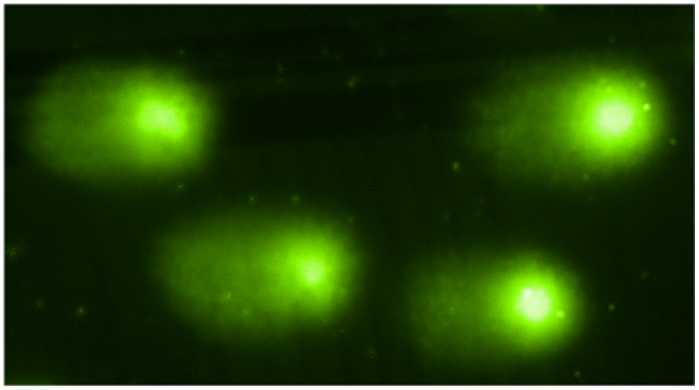
Manuals, SDS & CofA

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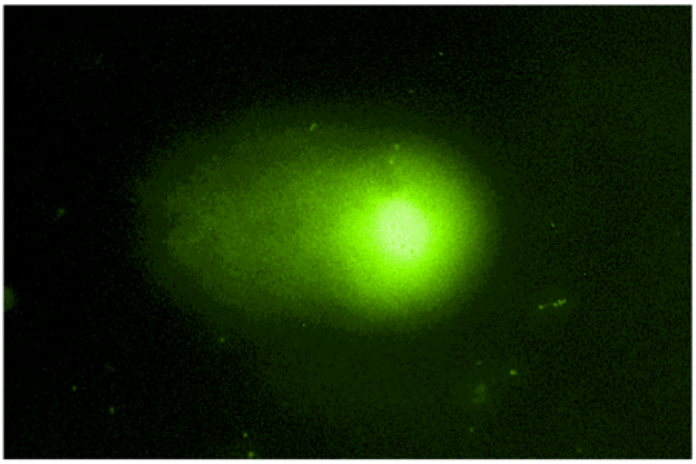
- Ready-to-use Comet Slides allow direct application of sample without pretreatment
- Shorter assay time allows for higher throughput sample analysis
- Hydrophobic barrier allows sample treatment with DNA repair enzymes
- Unique nucleic acid stain provides improved sensitivity for DNA visualization compared to ethidium bromide



Negative control. CaSki cells were untreated. Comet SCGE Assay was performed and slides were imaged using a FITC filter.



Positive control. CaSki cells were treated with 100mM hydrogen peroxide for 20 min at 4°C. Comet SCGE Assay was performed and slides were imaged using a FITC filter.



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Handling & Storage

Use/Stability	Store CYGREEN® Nucleic Acid Dye at -20°C and all other reagents at +4°C.
Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Application	Fluorescence microscopy
Application Notes	For the measurement of DNA Damage, DNA Repair, and Apoptosis in cells and tissue from any species via electrophoresis.
Assay Time	3 hours
Contents	Lysis solution, Comet LMAgarose, Comet slide, EDTA, CYGREEN® Nucleic acid dye
Species Reactivity	Species independent
Technical Info / Product Notes	Please note that CYGREEN® Nucleic acid dye is now included with the Comet SCGE assay kit. Please follow the recommended staining procedures in the updated manual.

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