

OxiSelect Comet Assay Slides (3-Well) Accessory Reagent

OxiSelect Comet Assay Slides (3-Well)

CATALOG #
AAA44580

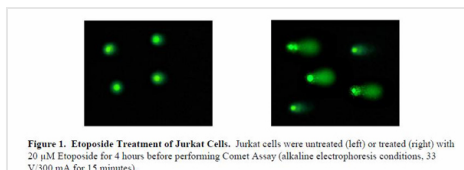
PRODUCT SYNONYMS

OxiSelect Comet Assay Slides (3-Well); OxiSelect Comet Assay Slides (3-Well) accessory reagent

PRODUCT SPECIFICATIONS

Preparation and Storage
STORAGE: Room Temperature

IMAGES



Application Data

ADDITIONAL INFORMATION

**Related Product Information for
OxiSelect Comet Assay Slides (3-Well)
accessory reagent**

Background: DNA damage, due to environmental factors and normal metabolic processes inside the cell, occurs at a rate of 1,000 to 1,000,000 molecular lesions per cell per day. While this counts for only a small part of the human genome's approximately 6 billion bases (3 billion base pairs), unrepaired lesions to critical genes can impede a cell's ability to carry out its function and appreciably increase the likelihood of cancer. The comet assay, or single cell gel electrophoresis assay (SCGE), is a common technique for measurement of DNA damage in individual cells. Under an electrophoretic field, damaged cellular DNA (containing fragments and strand breaks) is separated from intact DNA, yielding a classic "comet tail" shape under the microscope. Extent of DNA damage is usually visually estimated by comet tail measurement; however, image analysis software is also available for measuring various parameters.

**Product Categories/Family for
OxiSelect Comet Assay Slides (3-Well)
accessory reagent**

Oxidative Stress/Damage; DNA/RNA Damage and Repair; Comet Assay Kits and Slides

References

- Ostling, O., and Johanson, K. J. (1984). Micro gel electrophoretic study of radiation induced DNA damages in individual mammalian cells. *Biochem. Biophys. Res. Commun.* 123, 291-298.
- Singh, N. P., McCoy, M. T., Tice, R. R., and Schneider, E. L. (1988). A simple technique for quantification of low levels of DNA damage in individual cells. *Exp. Cell. Res.* 175, 184-191.
- Olive, P. L., Banath, J. P., and Durand, R. E. (1990a). Heterogeneity in radiation induced DNA damage and repair in tumor and normal cells using the "Comet" assay. *Radiat. Res.* 122, 86-94.
- De Boeck, M., Touil, N., De Visscher, G., Vande, P. A., and Kirsch-Volders, M. (2000). Validation and implementation of an internal standard in Comet assay. *Mutat. Res.* 469, 181-197.
- Liu, L. et al. (2014). TGFbeta Induces "BRCAness" and Sensitivity to PARP Inhibition in Breast Cancer by Regulating DNA-Repair Genes. *Mol Cancer Res.* 12:1597-1609.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.