

CometCoat™ Solution

CATALOG NUMBER: XDN-5200

QUANTITY: 2 mL

Background

The comet assay, or single cell gel electrophoresis assay (SCGE), is a common technique for the 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. One specific technical problem commonly occurring during the comet assay is the agarose gel sliding off the glass slide during the alkaline treatment and electrophoresis steps, even on slides precoated with agarose.

Cell Biolabs' proprietary CometCoat Solution is a quick, simple method to pretreat the glass surface for firmly immobilizing agarose gel onto glass slides during the entire comet assay protocol.

Storage

Store at room temperature.

Shelf Life

One year from date of receipt under proper storage conditions.

Protocol:

Note: Best results are obtained using a microscope slide with a printed mask outlining predefined wells, such as the slides shown in Figure 1. If using plain glass slides without a predefined well mask, mark the desired circular coating area on the underside of the slide with a marker.

1. Add a sufficient amount of the CometCoat™ Solution to cover each well of the slide. Use 20 µL per 14mm-diameter well and 10 µL per 8mm-diameter well. Scale the volume proportionally to the surface area of the well size being used.
2. Allow the slide to air dry for 5 min. Haziness is commonly seen after coating, but this will immediately disappear when the slide is immersed in the Lysis Solution.
3. Store the CometCoat™-treated slides at room temperature. Avoid high humidity conditions.

Example Results



Figure 1: Firm Attachment of Agarose Gel on CometCoat™-Treated Slides. **A:** Solidified agarose gels containing cells on untreated (left) and CometCoat™-treated (right) 10-well glass slide. **B:** After cell lysis, alkaline treatment and electrophoresis, agarose gels detached from the control slide (left), and remained firmly attached the CometCoat™-treated slide (right).

Warranty

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This product is for RESEARCH USE ONLY; not for use in diagnostic procedures.

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