

## TECHNICAL NOTES

## BIOBOND<sup>TM</sup> Tissue Section Adhesive (20ml) Product No. 15715

For immunohistochemistry the choice of specimen preparation is critical for the preservation of antigens in the sample. Of greatest importance in the preparation schedules are the specimen fixation and embedding. The protocol must satisfy the requirements for preservation of structural integrity and antigenicity.

## Why Coat Slides?

Having prepared the tissue specimen for immunolabelling it is then imperative to perform the incubations with a protocol designed to maximize the specific signal and minimize the background. Some incubation conditions may cause tissue sections to be removed from the glass slide. Typical tissue section adhesives such as poly-L-Lysine, Elmer's glue, chrome alum, etc are not suitable for use with immunogold labeling because of the increased background caused by attraction of gold particles to the adhesive on the slide.

In addition the surface of glass slides is uneven and is activated by the silicon tetrahedral structure. It therefore provides active sites for adsorption of proteins or reactions with chemicals and reagents. It is therefore important to minimize this possibility by coating the surface with a material that is of low reactivity towards reagents.

BIOBOND<sup>TM</sup> produces a very strong adhesion between the glass and the tissue section for subsequent incubations. BIOBOND<sup>TM</sup> coats the glass slide with a protective layer to minimize interaction of charged glass surface with reagents. This is also of particular importance for reproducibility of results because of the variations that occur between glass slides obtained from different sources and in different countries. It is particularly effective for use with severe incubating conditions such as those used in situ hybridization.

## Simple Coating Procedure

■ With **BIOBOND**<sup>TM</sup> there are no complicated procedures for coating slides. The following protocol will coat 100 or more slides.

Wear disposable rubber gloves while handling **BIOBOND**<sup>TM</sup>.

- 1. Load racks (metal or plastic) with slides. A rack of 25 at a time is most convenient.
- 2. Place the racks in a 2% solution of Decon detergent and leave soaking for 1 hour to clean.
- 3. Rinse thoroughly with tap water to remove all traces of Decon. If the local tap water is unclean or very hard then use distilled water.
  - 4. Air dry the slides at room temperature or at 40°C. Cover to protect from dust.
- 5. Prepare a 2% solution of **BIOBOND**<sup>TM</sup> in acetone (2ml in 100m1). General purpose reagent will be sufficient.
  - 6. Dip the rack of slides in **BIOBOND<sup>TM</sup>** solution for 4 minutes.
  - 7. Rinse for 5 minutes in clean tap water or distilled water.
  - 8. Air dry.

9. Once the slides are completely dry store in a dust free environment until needed (usually in the original slide box).

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The slides are then ready for mounting sections. They may be stored indefinitely. A 100m1 solution of 2% **BIOBOND**<sup>TM</sup> will coat at least 100 slides by this method.

**BIOBOND<sup>TM</sup>** is suitable for all kinds of tissue specimens including paraffin wax or resin sections, cell smears, cytospins or cryostat sections. **BIOBOND<sup>TM</sup>** is supplied in 20ml unit volumes, sufficient to coat at least 1000 slides.

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