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Product Information

StabilCoat® Immunoassay Stabilizer

Catalog Number **S0950**
Storage Temperature 2–8 °C

Product Description

StabilCoat® Immunoassay Stabilizer effectively preserves the conformation and activity of dried proteins in immunoassays. It simultaneously blocks and stabilizes with superior results. Use it to stabilize antibodies, antigens, or enzymes on an assortment of immunoassay platforms, such as polystyrene plates, tubes, glass, membranes, and filter paper. Substitute StabilCoat Immunoassay Stabilizer for the blocking solution for easy incorporation into most assay protocols.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the product at 2–8 °C or below. The product remains active for three years.

Procedures

To Stabilize Adsorbed or Immobilized Proteins on Multiwell Plates/Strips

1. Immobilize or adsorb the primary protein (antibody or antigen) according to the previously optimized procedure. Wash adequately to remove excess or weakly bound protein.
2. Immediately after washing, add StabilCoat Immunoassay Stabilizer solution to allow interaction with the entire protein-coated surface. For example, if 100 µl/well of the primary protein solution was added in step 1, then add 100 µl/well of the stabilizer solution. Do not let coated components dry before adding the stabilizer solution, since drying contributes to the loss of protein activity.
3. Incubate for 15–60 minutes at room temperature. For most assays, the stabilizer solution can replace the blocking solution. However, if the assay demands more blocking, mix the StabilCoat Immunoassay Stabilizer solution 1:1 with the current blocking solution for added blocking capability.
4. Remove or aspirate the stabilizer solution, but do not wash.
5. Dry components for long-term storage. Products coated with StabilCoat Immunoassay Stabilizer may require longer drying times than those without the stabilizer solution. Recommended methods are either:
   a. Place the plates in a humidity controlled chamber (<15% humidity) until dry (4–24 hours) or
   b. Dry plates at 30–40 °C in a vacuum oven for 4 hours. Drying times should be optimized for each application.
6. Package the final, stabilized product in an airtight container with a desiccant. This is especially important when the final product is stored in a humid environment or refrigerated (where condensation is likely to occur).

Stabilizer

To Stabilize Conjugates in Dry Form

1. If the conjugate is diluted before drying/lyophilizing, use the StabilCoat Immunoassay Stabilizer solution as the diluent. Otherwise, add between 5–10 parts of the stabilizer solution to one part conjugate. (Optimal ratio should be empirically determined.) Mix gently.
2. When lyophilizing in vials with rubber stoppers, stability can sometimes be improved by placing the rubber stoppers in a 100 °C vacuum oven for one hour before use. This dries them and drives off any volatiles present in the stopper.
3. Freeze the conjugate/stabilizer mixture, then lyophilize as normal. Lyophilization may require extra time.
4. For evaporation drying, place the conjugate/ stabilizer mixture in a 37–40 °C oven for four hours or until completely dry. The volume per container should be low enough to allow the maximum surface area to be exposed to the air during drying. Store the final product in an airtight container.

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