

StabilCoat® & 5X StabilCoat®

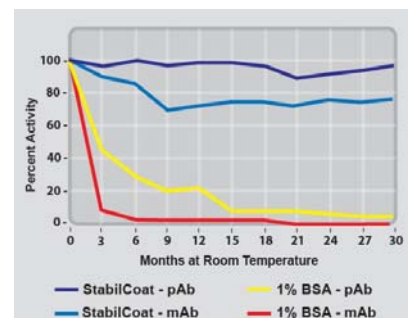
Immunoassay Stabilizer

9924 West 74th Street
Eden Prairie, MN 55344

StabilCoat® & 5X StabilCoat® Immunoassay Stabilizer effectively preserves the conformation and activity of dried proteins in immunoassays.

Stability Data

Stability tests were performed with StabilCoat stabilizer using either rabbit monoclonal or polyclonal IgG antibodies (see graph at right). Coated microtiter plates were stabilized with either StabilCoat stabilizer or 1% BSA. The antibody-coated plates were dried and placed at room temperature. Percent retained activity was determined by comparing the activity of the aged antibody-coated microtiter plates to that of freshly coated plates. After 30 months in StabilCoat stabilizer at room temperature, the monoclonal antibody retained 70% activity and the polyclonal antibody retained 95% activity.



Properties

Storage	Product should be refrigerated or stored at room temperature. Please note that SurModics Stabilization Products are shipped to customers at ambient temperature. Extensive stability studies have shown that prolonged storage at ambient temperature will not affect the product quality or efficacy.
Bovine Protein	Yes
Dry Weight (g/mL)	0.098 - 0.113 (same for 5X StabilCoat stabilizer when diluted 1:4)
Product Buffer	PBS
pH	7.0 - 7.4
Preservative	None. StabilCoat stabilizer is filtered through a 0.1 micron filter. Customers may add preservative to this product, if needed. SurModics recommends the use of ProClin™ preservative at the manufacturer's recommended use concentration.
Shelf Life	3 years
Acceptable Diluents	Deionized water or PBS

Applications

- StabilCoat stabilizer simultaneously blocks and stabilizes with superior results. It is a proven, critical component of several commercially available diagnostic devices.
- Use it to stabilize antibodies, antigens or enzymes on an assortment of immunoassay components, such as polystyrene plates, tubes, glass, membranes, and filter paper. It is easily incorporated into most assay protocols by simply substituting it for your blocking solution.

Recommendations for Use

The following are general guidelines only.

To Stabilize Adsorbed or Immobilized Proteins on Microtiter Plates/Strips

1. To prepare 1X StabilCoat stabilizer, add one part 5X StabilCoat stabilizer to four parts deionized water in a container suitable for mixing. (If you have been using a 1:1 dilution of 1X StabilCoat stabilizer, add one part 5X StabilCoat stabilizer to nine parts of deionized water.)
2. Mix well until homogenous. Avoid foaming. For small volumes, invert 10 times or use a stir bar for 15 minutes. For large volumes, a larger mixer is required.
3. Immobilize or adsorb the primary protein (antibody or antigen) according to the procedure optimized in your laboratory. Wash adequately to remove excess or weakly bound protein.
4. Immediately after washing, add StabilCoat stabilizer solution to allow interaction with the entire protein-coated surface. For example, if you added 100 µl/well of the primary protein solution in step one, then add 100 µl/well StabilCoat stabilizer solution. Do not let coated components dry before adding StabilCoat stabilizer solution since drying contributes to the loss of protein activity.
5. Incubate for 15 to 60 minutes at room temperature. For most assays, StabilCoat stabilizer can replace the blocking solution. However, if your assay demands more blocking, mix StabilCoat stabilizer 1:1 with your current blocking solution for added blocking capability.
6. Remove or aspirate the StabilCoat stabilizer solution, but do not wash.
7. Dry components for long-term storage. Products coated with StabilCoat stabilizer may require longer drying times than those without StabilCoat stabilizer. Recommended methods are to either (1) place plates in a humidity controlled chamber (less than 15% humidity) until dry (4 to 24 hours); or (2) dry plates at 30-40°C in a vacuum oven for 4 hours. *Drying times should be optimized for each application.*
8. 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).

To Stabilize Adsorbed or Immobilized Proteins on Membranes

1. Immobilize or adsorb the primary protein (antibody or antigen) according to the procedure optimized in your laboratory.
2. Dilute one part StabilCoat stabilizer in three parts compatible buffer or deionized water. Add 0.01% surfactant.
3. For 5X StabilCoat stabilizer, dilute 1 part 5X StabilCoat stabilizer in 15 parts compatible buffer or deionized water *plus* 0.01% surfactant. Mix well. Avoid foaming.
4. Coat membrane by incubating or spraying with the StabilCoat stabilizer mixture.
5. Dry thoroughly. Faster drying results in better flow properties.
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).

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To Stabilize Conjugates in Dry Form

1. If you dilute your conjugate before drying/lyophilizing, use StabilCoat stabilizer as the diluent. Otherwise, add between five and ten parts StabilCoat stabilizer or one and two parts 5X StabilCoat stabilizer to one part conjugate. (Optimum ratio should be empirically determined.) Mix gently.
2. If you are 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 maximum surface area to be exposed to air during drying. Store the final product in an airtight container.

Technical Assistance

For technical inquiries, please email IVDtechsupport@surmodics.com or call (952) 829-2709.

Ordering Information

To place an order for this product, please contact our customer service desk at:

Tel: (952) 829-2709

Toll Free: (800) 755-7793

Fax: (952) 829-2743

Email: orders@surmodics.com

Web: www.surmodicsIVD.com

StabilCoat (SC01) & 5X StabilCoat (SC05) Immunoassay Stabilizer are available in the following sizes:		
100 mL	1000 mL	2000 mL
	SC01-1000	SC01-2000
SC05-0100	SC05-1000	SC05-2000