

## StabilBlock™ Immunoassay Stabilizer

Product insert

#### **Product number:**

ST01-0050 (50 mL) ST01-1000 (1000 mL)

#### **Product use:**

StabilBlock™ Immunoassay Stabilizer effectively preserves the conformation and activity of dried proteins while simultaneously blocking the surface to reduce non-specific binding. It can be used to stabilize antibodies, antigens or enzymes on an assortment of immunoassay components: polystyrene plates, tubes, glass, membranes, and filter paper. The key benefits are reduction of non-specific binding while increasing signal-to-noise ratios within immunoassay applications.

The non-specific binding of serum proteins, conjugates and other assay components to solid surfaces in immunoassay applications requires that a blocking step be incorporated into the protocol to maximize assay sensitivity. Additionally, the manufacturing of immunoassays test kits requires long term protein stability to increase the manufacturing scale and extended shelf lives for the end user. The StabilBlock formulation allows for these requirements to be accomplished in a single step while easily being substituted for the blocking solution in an existing assay protocol.

### Product stability, storage and specifications:

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Product stability	3 years from date of manufacture
Storage	Product should be stored at 2-8° C or room temperature
Specification	Protein: BSA-Free
	Product Buffer: MOPS
	pH: 6.5-7.5
	Preservative: 0.02% methylisothiazolinone, 0.02% bromonitrodioxane
Notes	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.

#### **Recommendations for use:**

Aseptically pour off the desired volumes of material needed for the application and allow the product to equilibrate at room temperature prior to use.

The following are general guidelines only.

#### To Stabilize Adsorbed or Immobilized Proteins on Microtiter Plates/Strips:

- 1) Immobilize or adsorb the primary protein (antibody or antigen) to the plate surface according to an optimized method.
- 2) Wash the plate to remove excess or weakly bound proteins.
- 3) Add StabilBlock to allow interaction with the entire protein-coated surface.
  - For example: if the total assay volume is 150 μL, add at least 200 μL of StabilBlock to each well.
- 4) Incubate up to 60 minutes at room temperature. Reduced incubation times can be achieved in certain applications.
- 5) Aspirate the excess StabilBlock from the microwells.
- 6) Dry components for long-term storage using a method that is optimized by the end user. Recommended methods are as follows:
  - Dry in a humidity controlled chamber (less than 15% humidity) until dry (4 to 24 hours).
  - Dry 2-4 hours in a sealed desiccated container.

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- Dry plates at 30-40°C in a vacuum oven for 4 hours.
- 7) Package the stabilized coated plate in a heat-sealed moisture proof pouch with a desiccant.

For technical assistance, email ivdtechsupport@surmodics.com

## **Related products:**

Blockers/Stabilizers:	
StabilCoat™ Immunoassay Stabilizer (SC01)	
StabilCoat™ Plus Stabilizer (SC02)	
StabilGuard™ Immunoassay Stabilizer(BSA-Free) (SG01)	
StabilGuard™ Choice Stabilizer (BSA-Free) (SG02)	
In-Solution Protein Stabilizers & Diluents:	
StabilZyme™ Protein Free Stabilizer (SZPF)	
StabilZyme™ Protein Free AP Stabilizer (SAPF)	
StabilZyme™ AP Conjugate Stabilizer (SA01)	
StabilZyme™ HRP Conjugate Stabilizer (SZ02)	
StabilZyme™ SELECT Stabilizer (SZ03)	
StabilZyme™ NOBLE Stabilizer (SZ04)	
Surmodics™ Assay Diluent (Protein-Free) (SM01)	
MatrixGuard™ Assay Diluent (SM02)	
Substrates:	
BioFX™ TMB Supersensitive One Component HRP Microwell Substrate (TMBS)	
BioFX™ TMB One Component HRP Microwell Substrate (TMBW)	
BioFX™ TMB Conductivity One Component HRP Microwell Substrate (TMBC)	
BioFX™ TMB Slow Kinetic One Component HRP Microwell Substrate (TMSK)	
BioFX™ TMB Extended Range HRP Microwell Substrate (TMBX)	
BioFX™ TMB Enhanced HRP Membrane Substrate (ESPM)	
BioFX™ TMB One Component HRP Membrane Substrate (TMBM)	
BioFX™ pNPP Yellow One Component Microwell Substrate with Stabilizing Pellets (PNPS)	
BioFX™ ABTS One Component HRP Microwell Substrate (ABTS)	

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