

StabilCoat® Plus Stabilizer improves the stability of proteins bound to microspheres stored in solution and the performance of protein arrays used in *in vitro* diagnostics & drug discovery.



Consistent.

StabilCoat Plus stabilizer decreases variability often associated with shipping and storage conditions, thereby producing more consistent results with your microsphere or microarray application.



Quality.

StabilCoat Plus stabilizer is manufactured per ISO 9001 and 13485 standards under stringent controls to ensure lot-to-lot consistency and traceability.



Time.

StabilCoat Plus stabilizer is ready-to-use, eliminating the preparation time of producing your own stabilization and blocking reagents.



StabilCoat® Plus

Stabilizer

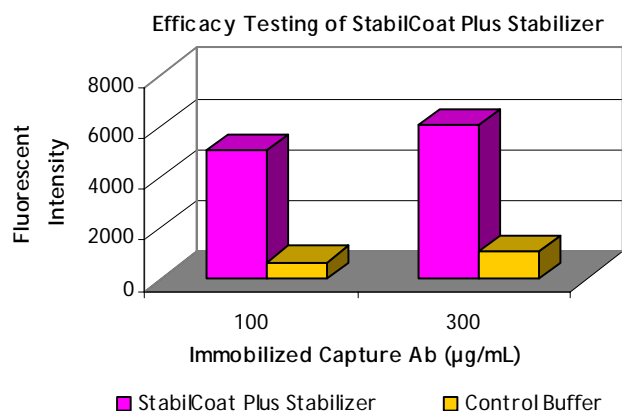
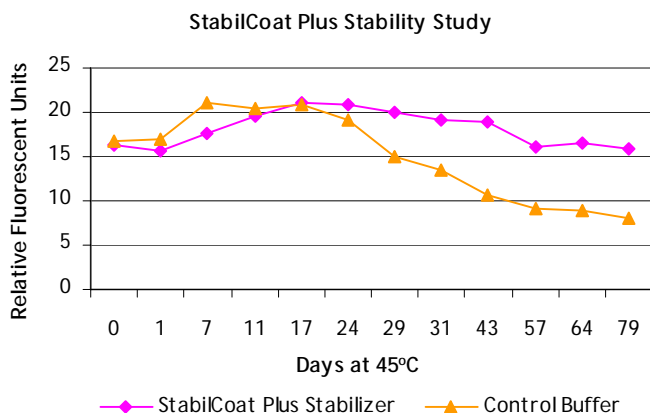
Stability Data

Microsphere Applications

Accelerated and real-time stability studies were conducted to evaluate the effectiveness of StabilCoat Plus stabilizer to block and stabilize rabbit polyclonal antibody-coated polystyrene microspheres in solution. The microspheres were stabilized with either StabilCoat Plus stabilizer or a control buffer and stored in solution at 45°C. Compared to the control buffer results, which showed that the microspheres dropped below 90% binding activity after 29 days at 45°C, StabilCoat Plus Stabilizer retained >96% binding activity after 79 days at 45°C.

Microarray Applications

Monoclonal antibody to IFN γ (100 and 300 $\mu\text{g}/\text{mL}$) was arrayed on a SurModics protein-binding surface using BioRobotics split pins and a BioRobotics arrayer. Cocktail antigens containing recombinant human IFN γ at 25 ng/mL were incubated on slides using a control buffer and StabilCoat Plus stabilizer. After incubation, arrays were developed with biotinylated antibody cocktail suspended in the same reagents, respectively. The spots were visualized by incubating with Streptavidin Cy5. Compared to the control buffer, the use of StabilCoat Plus stabilizer demonstrated significantly increased signal intensity.



Properties & Applications

- StabilCoat Plus stabilizer protects the activity of proteins while simultaneously blocking nonspecific binding sites on microspheres. As an added benefit, it prevents microsphere aggregation, keeping them monodispersed even after long-term storage.
- The conformation and activity of the proteins on arrays are also effectively preserved when stored with StabilCoat Plus stabilizer long-term in a dried state. More accurate results are produced on array slides by increasing signal, reducing background, and improving sensitivity.
- StabilCoat Plus stabilizer contains a mercury-free and azide-free preservative to prevent microbial contamination associated with long-term storage.
- StabilCoat Plus stabilizer should not be used with proteins that are adsorbed to microspheres.
- StabilCoat Plus stabilizer may produce variable results on different protein array surface chemistries.



StabilCoat is a registered trademark of SurModics, Inc.
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