PRODUCT INFORMATION

ELISA Microplate Stabiliser – 1 L
PRODUCT CODE: X-STB-0002
STORAGE: 2 - 8 °C, protect from sun light

PRODUCT DESCRIPTION

BioThinX proprietary coated microplate stabiliser generates a protective surface layer that inhibits biomolecule inactivation during storage of coated microplates.

The stabiliser is added to coated microplates as a final step before drying. During the subsequent simple drying process at room temperature or 37 °C, the reagent spreads over the microplate surface and forms a glassy matrix that fully covers the coated biomolecules. This results in the long-term stabilization of coated plates even at ambient temperature, which is a significant improvement in stabilising coated ELISA plates for reproducible applications.

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.

FORMULATION

ELISA Microplate Stabiliser is stable for shipping at ambient temperature. The product is protein free and contains a HEPES, NaCl, complex biomolecule buffer base at neutral pH.

PREPARTION AND HANDLING

Coat ELISA microplate with the primary protein, antibody or antigen. Add blocking solution, incubate and wash adequately. Add ELISA Microplate Stabilizer in minimum in the same volume/well as primary coating volume. Incubate for > 15 minutes at room temperature. In generally the stabilizer solution is not a replacement of your preferred blocking solution. Alternatively mix the ELISA Microplate Stabiliser solution 1: 1 with the preferred blocking solution. Remove or aspirate the Microplate Stabiliser solution without any additional washing step. Dry microplates below 15 % relative humidity at 20 – 40 °C
(2 -24 h). For long-term storage, pack microplates airtight with activated silica gel or molecular sieve drying reagent.

STORAGE / STABILITY

For long term storage the product should be stored between 2 °C and 8 °C.

RECOMMENDED DILUTION

Ready-to-use solution, use undiluted or 1:1 diluted with preferred blocking solution.

BACKGROUND REFERENCES

1. Hengherr, S., et al., High-temperature tolerance in anhydrobiotic tardigrades is limited by glass transition, Physiol. Biochem. Zool., 82, 749-755 (2009).
2. Koubaa, S., er al., Structural properties and enzyme stabilization function of the intrinsically disordered LEA_4 protein TdLEA3 from wheat, Nature Scientific Reports, (9) Article number: 3720 (2019).
3. Carpenter, J., F., Comparison of solute-induced protein stabilization in aqueous solution and in the frozen and dried states, J. Dairy Sci. 73, 3627-3636 (1990)
4. Killian, M., S., Stabilization of dry protein coatings with compatible solutes, Biointerphases, 13(6), 06E401 (2018)