

EZSolution™ Protein Stabilizer

CATALOG #: 7928 -1 1 ml
7928 -10 10 ml

SOURCE: *E. coli*

FORM: Liquid

FORMULATION: Provided as a 1 mg/ml solution in phosphate buffer, pH 7.5.

MOL. WEIGHT: Oligomeric mixture of ~50 kDa proprietary protein.

STORAGE CONDITIONS: Store at 4°C.

Usage Instructions: BioVision's EZSolution™ Protein Stabilizer comes as a ready-to-use protein formulation. Add the stabilizer directly to the target protein in 1:1 ratio (w/w) and store at the appropriate temperature. Other modifications/adjustments may be necessary to further increase the stability of the specific target protein.

DESCRIPTION: BioVision's EZSolution™ Protein Stabilizer is a very effective BSA alternative. It consists of a proprietary protein expressed in *E. coli*. The proprietary formulation helps protect proteins and enzymes against heat or chemically-induced environmental stresses that can otherwise lead to enzyme inactivation or hyper-activation, aggregation and freeze-thaw damage. The EZSolution™ Protein Stabilizer is provided as a ready-to-use liquid formulation that can be directly added to protein/enzyme of interest. Such samples can be further refrigerated or frozen for storage with enhanced stability. The degree of stabilization is protein-specific; the EZSolution™ Protein Stabilizer has been tested to significantly increase the stability of a variety of proteins under thermal and chemical stress.

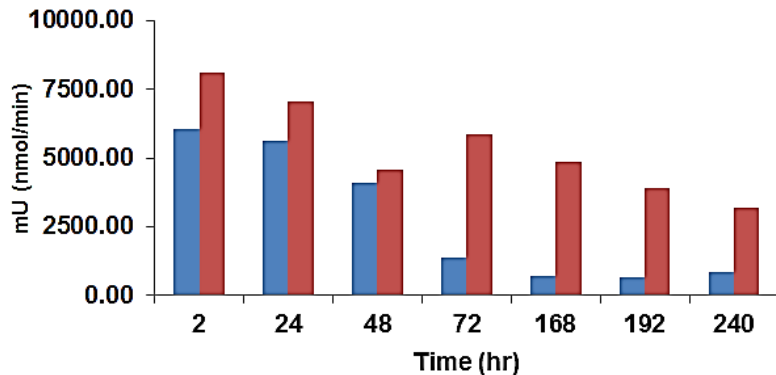


Figure 1: Stabilization of active human Cathepsin B (Cat # 7580), a cysteine protease, by EZSolution™ Protein Stabilizer under thermal stress. Active Cathepsin B was heated at 37°C in the absence (Blue bars) and presence (Red bars) of EZSolution™ Protein Stabilizer. At regular time intervals, Cathepsin B activity was measured using Cathepsin B Activity Fluorometric Assay Kit (K140-100). Even after 10 days under thermal stress, the enzyme retained significantly high activity (~40%) in the presence of EZSolution™ Protein Stabilizer, while in its absence the enzyme lost ~90% of its initial activity in 3 days.

APPLICATIONS: BioVision's EZSolution™ Protein Stabilizer has numerous applications:

- Increases stability of inactive proenzymes & active enzymes under chemical/thermal stress.
- Inert protein stabilizer for increasing shelf-life of purified recombinant proteins.
- Protective additive in cell culture.
- Stabilizer for antibodies/antigens in immunoassays (optimization required).

ADVANTAGES OF EZSolution™ Protein Stabilizer:

- Non-toxic and non-antigenic.
- Does not destabilize biomolecules in downstream assays
- Filterable through a 0.2 µm membrane and easily pipettable.
- Free from nucleic acids, polysaccharides and lipids.
- Stabilizes protein classes including proteases, kinases, phosphatases, and cytokines.

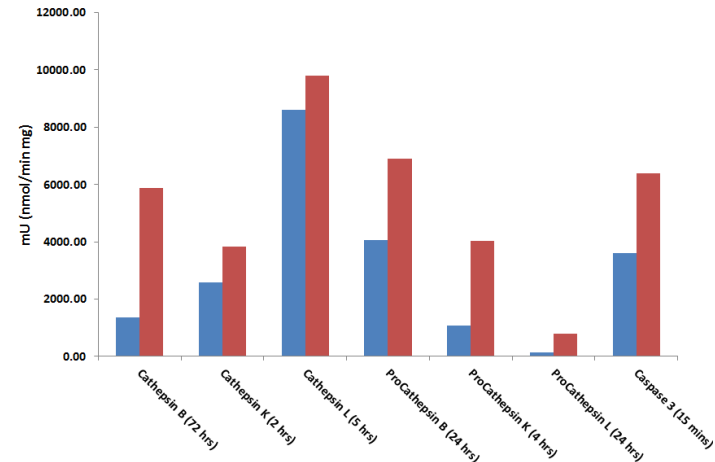


Figure 2: Stabilization of active human cathepsin B (Cat # 7580), Cathepsin K (Cat # 7600), Cathepsin L (Cat # 1135), Procathepsin B (Cat # 7579), Procathepsin K (Cat # 1026), Procathepsin L (Cat # 7581) and Caspase 3 (Cat # 1083) before (blue bars) and after (red bars) the addition of EZSolution™ Protein Stabilizer using different BioVision assay kits – K140-100, K150-100, K161-100, K140-100, K150-100, K161-100 and K150-100 respectively.

- RELATED PRODUCTS:**
- Prionex (Cat # 1033-100)
 - Cathepsin K, Active, human recombinant (Cat # 7600-5, 50)
 - Active Cathepsin B, human recombinant (Cat # 7580-5, 50, 500)
 - Active Cathepsin S, human recombinant (Cat # 7526-10, 50, 500)
 - Procathepsin K human recombinant (Cat # 1026-10, 50, 1000)
 - Procathepsin L human recombinant (Cat # 7581-5, 100, 1000)
 - Procathepsin B human recombinant (Cat # 7579-10, 50, 1000)
 - Procathepsin S human recombinant (Cat # 7525-10, 50, 500)
 - BSA (10% in H2O) (Cat # 2119-10)
 - Bovine Serum Albumin – Fraction V, 30% Solution (Cat # 7914-100, 500)

FOR RESEARCH USE ONLY! Not to be used in humans.