

Thymosin β4 Catalog # PVGS1159

Product Information

Primary Accession P62328
Species Human

Sequence Ser2-Ser44

Purity > 97% as analyzed by SDS-PAGE

> 97% as analyzed by HPLC

Endotoxin Level

Biological Activity Fully biologically active when compared to standard. The biological activity

determined by its ability to produce a protective effect against hydrogen peroxide in primary lung fibroblasts is in a concentration range of 0.5-10.0

□g/ml.

Expression System E. coli

Theoretical Molecular Weight 4.9 kDa

Formulation Lyophilized from a 0.2 Im filtered solution in 20 mM PB, pH 7.4.

ReconstitutionIt is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a

concentration of 0.1-1.0 mg/ml.

Storage & Stability Upon receiving, this product remains stable for up to 6 months at -70°C or

-20°C. Upon reconstitution, the product should be stable for up to 1 week at

4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID 7114

Other Names Thymosin beta-4, T beta-4, Fx, Hemoregulatory peptide AcSDKP,

Ac-Ser-Asp-Lys-Pro, N-acetyl-SDKP, AcSDKP, Seraspenide, TMSB4X, TB4X,

THYB4, TMSB4

Target Background Thymosin Beta 4 is a naturally occurring peptide. It is found in high

concentrations in blood platelets, wound fluid and other tissues in the body. Tβ4 is not a growth factor; rather, it is a major actin regulating peptide. The thymosin beta-4 peptide, if used after a heart attack, might reactivate cardiac

progenitor cells to repair damaged heart tissue.

Protein Information

Name TMSB4X

Synonyms TB4X, THYB4, TMSB4

Function Plays an important role in the organization of the cytoskeleton

(PubMed: <u>10848969</u>, PubMed: <u>1999398</u>). Binds to and sequesters actin monomers (G actin) and therefore inhibits actin polymerization

(PubMed: 10848969, PubMed: 1999398).

Cellular Location Cytoplasm, cytoskeleton

Tissue Location Expressed in several hemopoietic cell lines and lymphoid malignant cells.

Decreased levels in myeloma cells

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.