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Thymosin β4
Catalog # PVGS1159

Specification

Thymosin β4 - Product Information

Primary Accession P62328
Species
Human

Sequence
Ser2-Ser44

Purity
> 97% as analyzed by SDS-PAGE
> 97% as analyzed by HPLC

Endotoxin Level
< 1 EU/ µg of protein by LAL method

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 µg/ml.

Expression System
E. coli

Theoretical Molecular Weight
4.9 kDa

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

Reconstitution
It 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.

Thymosin β4 - 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

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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.

Thymosin β4 - Protein Information

Name TMSB4X

Synonyms TB4X, THYB4, TMSB4

Function
Plays an important role in the organization of the cytoskeleton (PubMed:10848969, PubMed:1999398). 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

Thymosin β4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Thymosin β4 - Images