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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 m 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.

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: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