

PrimeGene Technical Data Sheet

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| Catalog Number: | 601-20 |
| Source: | <i>Escherichia coli</i> . |
| Molecular Weight: | Approximately 4.9 kDa, a single non-glycosylated polypeptide chain containing 43 amino acids. |
| Quantity: | 20μg/100μg/1000μg |
| AA Sequence: | SDKPDMAEIE KFDKSKLKKT ETQEKNPLPS KETIEQEKQA GES |
| Purity: | > 97 % by SDS-PAGE and HPLC analyses. |
| 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 μg/ml. |
| Physical Appearance: | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Formulation: | Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, pH 7.4. |
| Endotoxin: | Less than 1 EU/μg of rHuTβ4 as determined by LAL method. |
| Reconstitution: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| Shipping: | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage: | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution. |
| Usage: | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. |

Human Thymosin Beta 4

Thymosin Beta 4 is a naturally occurring peptide encoded by the TMSB4X gene located on Chr. X in humans. It is found in high concentrations in blood platelets, wound fluid and other tissues in the body. Tβ-4 is a major actin regulating peptide and the primary function is to stimulate the productions of T cells, which plays important part of the immune system. The thymosin beta-4 peptide, if used after a heart attack, might reactivate cardiac progenitor cells to repair damaged heart tissue.