Recombinant Human TGF-β 3 Protein

Size / Cat.No.: 50μg / GMP-TL646-0050

Product Name	
Generic Name	Recombinant Human TGF-β3 Protein
Synonym	Transforming Growth Factor-β3

Product Information	
Protein sequence	A DNA sequence encoding the human TGF-β3（P10600 A301-S412）was expressed with a Fc-tag at the C-terminus.
Expression Host	HEK293 cells
QC Testing Purity	> 90 % as determined by SDS-PAGE
Activity	Determined by the dose-dependent stimulation of the inhibitory proliferation of IL-4 -dependent mouse HT-2 cells.The expected ED 50 for this effect is ≤ 0.1 ng/mL.
Endotoxin	< 0.1EU per 1 μg of the protein by the LAL method.
Molecular Mass	The recombinant human TGF-β3 protein consists of 375 amino acids and predicts a molecular mass of 42.1 kD.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 6 % mannitol are added as protectants before lyophilization.
Stability & Storage	24 months at 2℃ to 8℃ in lyophilized state. 6 months at -20℃ under sterile conditions after reconstitution. 12 months at -80℃ under sterile conditions after reconstitution. Recommend to aliquot the protein into smaller quantities after reconstituting with water for injection, normal saline or PBS, and keep the diluted concentration above 100μg/mL. Avoid repeated freeze-thaw cycles.

Background

Transforming growth factor-β、Transforming growth factor-β1、β2 and β3 subtypes of mammals emit signals through the same receptor, causing similar biological reactions. They are multifunctional cytokines that regulate cell proliferation, growth, differentiation, and motility, as well as the synthesis and deposition of extracellular matrix. They participate in various physiological processes, including embryogenesis, tissue remodeling, and wound healing. They are mainly secreted in the form of potential complexes and stored on the cell surface and extracellular matrix.Release of biologically active transforming growth factor- β isoforms from potential complexes, including proteolysis, processing of complexes, and/or Thrombin reaction reagin-1 conformational changes in proteins .The physiological role of TGF-β3 is not yet clear, but its expression pattern suggests that it plays a regulatory role in certain developmental processes.

References

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