


Mouse TGF beta 1 protein, His tag (Animal-Free)

Cat #: PRP1017

Size: 10 µg/50 µg/100 µg/1 mg

Product Information

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| | Product Name: Mouse TGF beta 1 protein, His tag (Animal-Free) | | |
| REF | Catalog Number: PRP1017 | LOT | Lot Number: |
| | Purity: >95% as determined by SDS-PAGE | | |
|  | Storage: Store at -20°C | | Preparation method: HEK 293 cells |
| | Shipping: The product is shipped at ambient temperature | | |

Background: TGF-beta 1 is a member of the transforming growth factor beta (TGF-beta) family. The transforming growth factor-beta family of polypeptides are involved in the regulation of cellular processes, including cell division, differentiation, motility, adhesion and death. TGF-beta 1 positively and negatively regulates many other growth factors. It inhibits the secretion and activity of many other cytokines including interferon- γ , tumor necrosis factor-alpha and various interleukins. It can also decrease the expression levels of cytokine receptors. Meanwhile, TGF-beta 1 also increases the expression of certain cytokines in T cells and promotes their proliferation, particularly if the cells are immature. TGF-beta 1 also inhibits proliferation and stimulates apoptosis of B cells, and plays a role in controlling the expression of antibody, transferrin and MHC class II proteins on immature and mature B cells. As for myeloid cells, TGF-beta 1 can inhibit their proliferation and prevent their production of reactive oxygen and nitrogen intermediates. However, as with other cell types, TGF-beta 1 also has the opposite effect on cells of myeloid origin. TGF-beta 1 is a multifunctional protein that controls proliferation, differentiation and other functions in many cell types. It plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts. Once cells lose their sensitivity to TGF-beta1-mediated growth inhibition, autocrine TGF-beta signaling can promote tumorigenesis. Elevated levels of TGF-beta1 are often observed in advanced carcinomas, and have been correlated with increased tumor invasiveness and disease progression.

Sequence: Amino acid sequence derived from mouse TGF β -1 (P04202) (Met1-Ser390) was expressed with a 6 His tag at the C-terminus.

Protein length: The recombinant human consists of 91 amino acids and predicts a molecular mass of 42.7 kDa. It migrates as an approximately 54, 41 and 15 kDa band in SDS-PAGE under reducing conditions.

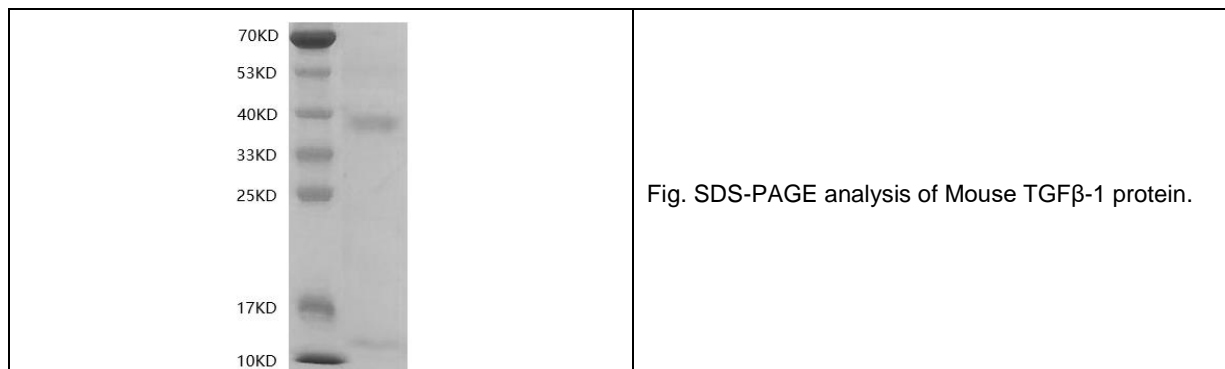
Biological Activity: Testing in progress.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Formulation: Lyophilized from sterile PBS, pH 7.4.

Storage Instructions: Lyophilized Mouse TGFβ-1 product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Mouse TGFβ-1 protein in sterile ddH₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.



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