Recombinant Mouse Tgfb1 protein, His-tagged

Cat. No. Tgfb1-242M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Tgfb1 fused with His tag was expressed in E. coli.
Species	Mouse
Source	E.coli
Description	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 1can 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-

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	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.
Form	Lyophilized from sterile PBS, pH 7.4
Purity	> 95 % as determined by SDS-PAGE
Storage	Store at -70 centigrade. Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name	Tgfb1 transforming growth factor, beta 1 [Mus musculus]
Official Symbol	Tgfb1
Synonyms	TGFB1; transforming growth factor, beta 1; transforming growth factor beta-1; TGF-beta 1; TGF-beta-1; regulatory protein; transforming growth factor-beta 1; Tgfb; Tgfb-1; TGFbeta1; TGF-beta1;
Gene ID	21803
mRNA Refseq	NM_011577
Protein Refseq	NP_035707
UniProt ID	P04202
Chromosome Location	7 A3; 7 13.98 cM
Pathway	Adipogenesis, organism-specific biosystem; Amoebiasis, organism-specific

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	biosystem; Amoebiasis, conserved biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserved biosystem; Cell cycle signaling pathway, organism-specific biosystem;
Function	enzyme binding; eukaryotic cell surface binding; growth factor activity; protein N-terminus binding; protein binding; protein heterodimerization activity; protein homodimerization activity; transforming growth factor beta receptor binding; type II transforming growth factor beta receptor binding;

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