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Datasheet for ABIN2469123 TGF-beta Protein (TGFb)

Overview

Quantity:	0.002 mg
Target:	TGF-beta (TGFb)
Origin:	Human
Source:	Hi-5 Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Sequence:	ALDAAYCFRN VQDNCCLRPL YIDFKRDLGW KWIHEPKGYN ANFCAGACPY LWSSDTQHRS VLSLYNTINP EASASPCCVS QDLEPLTILY YIGKTPKIEQ LSNMIVKSCK CS
Characteristics:	The ED50 was determined by its ability to inhibit the mouse IL - 4 - dependent proliferation of mouse HT - 2 cells. The ED50 was found to be < 0.2 ng/mL, corresponding to a specific activity of > 5 x 10 ⁶ units/mg.
Purity:	< 98 % by SDS-PAGE gel and HPLC analyses.
Endotoxin Level:	Endotoxin level is less than 0.1 ng per µg (1 EU/µg).

Target Details

Target:	TGF-beta (TGFb)
Alternative Name:	TGF beta (TGFb Products)
Background:	The three mammalian isoforms of TGF-beta, TGF-beta1, beta2, beta3, signal through the same receptor and elicit similar biological responses. They are multifunctional cytokines that regulate

Target Details

cell proliferation, growth, differentiation and motility as well as synthesis and deposition of the extracellular matrix. They are involved in various physiological processes including embryogenesis, tissue remodeling and wound healing. They are secreted predominantly as latent complexes which are stored at the cell surface and in the extracellular matrix. The release of biologically active TGF-beta isoform from a latent complex involves proteolytic processing of the complex and /or induction of conformational changes by proteins such as thrombospondin-1. TGF-beta2 has been shown to exert suppressive effects on IL-2 dependent T-cell growth, and may also have an autocrine function in enhancing tumor growth by suppressing immuno-surveillance of tumor development. Recombinant human TGF-beta2 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

Gene ID: 7042

NCBI Accession: [NP_001129071](#)

OMIM: 208022653

UniProt: [P61812](#)

Pathways: [EGFR Signaling Pathway](#), [Cellular Response to Molecule of Bacterial Origin](#), [Stem Cell Maintenance](#), [Glycosaminoglycan Metabolic Process](#), [Regulation of Muscle Cell Differentiation](#), [Cell-Cell Junction Organization](#), [Ribonucleoside Biosynthetic Process](#), [Skeletal Muscle Fiber Development](#), [Regulation of Carbohydrate Metabolic Process](#), [Protein targeting to Nucleus](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Handling Advice: As with any protein, exposing TGF Beta recombinant protein to repeated freeze / thaw cycles is not recommended. When working with proteins care should be taken to keep recombinant protein at a cool and stable temperature.

Storage: -20 °C

Storage Comment: The recombinant protein is stable for at least 2 years from date of receipt at -20 °C. Reconstituted TGF Beta is stable for at least 3 months when stored in working aliquots with a carrier protein at -20 °C.

Handling

Expiry Date: 24 months