Datasheet for ABIN6700723

TGFB1 Protein

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	TGFB1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Human Transforming Growth Factor beta 1 Recombinant Protein
Purification:	Transforming Growth Factor beta 1 purity was determined to be greater than 98% as determined by reducing and non-reducing SDS-pAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is measured by the dose-dependent inhibition of IL-4-induced proliferation from mouse HT-2 cells and is typically 0.04-0.2 ng/mL.

Target Details

Target:	TGFB1
Alternative Name:	TGFB1 (TGFB1 Products)
Background:	Synonyms: Differentiation inhibiting factor, cartilage-inducing factor Background: Transforming Growth Factor-beta 1 (TGF-β1) is a member of the TGF-beta

Target Details

	superfamily. Members of this family are known to exhibit regulatory activity in immunity and proliferation pathways. TGF-β1 signals through SMAD proteins via the TGF-β1 RI and RII receptors. Mature human TGF-β1 is a glycosylated homodimer, containing two 112 amino acids chains, with a total molecular weight of 25 kDa.
UniProt:	P01137
Pathways:	EGFR Signaling Pathway, Dopaminergic Neurogenesis, Cellular Response to Molecule of Bacterial Origin, Glycosaminoglycan Metabolic Process, Regulation of Leukocyte Mediated Immunity, Regulation of Muscle Cell Differentiation, Positive Regulation of Immune Effector Process, Cell-Cell Junction Organization, Production of Molecular Mediator of Immune Response, Ribonucleoside Biosynthetic Process, Skeletal Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Protein targeting to Nucleus, Autophagy, Cancer Immune Checkpoints

Application Details

Application Notes:	Application Note: Transforming Growth Factor beta 1 Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Transforming Growth Factor beta 1 in immunological assays. Other: User Optimized
Restrictions:	For Research Use only

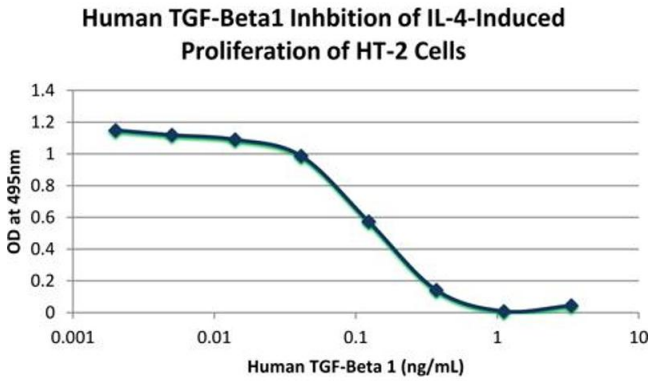
Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 µL
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each

Handling

	opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiry Date:	6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Human Transforming Growth Factor beta 1 Recombinant Protein Bioactivity of Human Transforming Growth Factor beta 1 Recombinant Protein. Serial dilutions of Human TGF-Beta 1 (starting at 10 ng/mL) were added to HT-2 cultured with IL-4. Cell proliferation was measured and the linear portion of the curve was us used to calculate the ED50. The ED50 of Human TGF-Beta 1 is between 0.1-0.15 ng/mL. This is comparable to the expected range of 0.04-0.2 ng/mL for this assay.