

## Datasheet for ABIN7597338

# TGFB1 Protein (AA 30-390) (His tag)



### Overview

Quantity:	10 μg
Target:	TGFB1
Protein Characteristics:	AA 30-390
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TGFB1 protein is labelled with His tag.

#### **Product Details**

Purpose:	Recombinant human TGFB1(30-390) Protein with C-terminal 10xHis tag
Sequence:	TGFB1(Leu30-Ser390) 10xHis tag
Purity:	The purity of the protein is greater than 80 % as determined by SDS-PAGE and Coomassie blue staining.

# **Target Details**

Target:	TGFB1
Alternative Name:	TGFB1 (TGFB1 Products)
Background:	CED, LAP, DPD1, TGFB, IBDIMDE, TGFbeta, TGF-beta1
	This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta)
	superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to
	recruitment and activation of SMAD family transcription factors that regulate gene expression.

The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGFB family members. This encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon gamma and tumor necrosis factor alpha. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease. [provided by RefSeq, Aug 2016]

Molecular Weight:

predicted molecular mass of 42.6 kDa after removal of the signal peptide.

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**

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Extracellular Domain Proteins (ECD) can be used as:

- · Immunogens for antibody drug development
- · Reagents used for CAR-T positive cell monitoring
- · Reagents for antibody screening and functional testing
- · Reagents for antibody affinity measurement

Comment:

The protein was made using HEK293 mammalian cell secretion expression system to ensure the close-to-native structures and post-translational modifications of the target protein.

Restrictions:

For Research Use only

#### Handling

Format: Lyophilized

Buffer: Lyophilized from sterile PBS, pH 7.4. Normally 5 % – 8% trehalose is added as protectants

before lyophilization.

# Handling

Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing).  Lyophilized proteins are shipped at ambient temperature.
Expiry Date:	12 months