

Datasheet for ABIN7505538

TGFB3 Protein (AA 24-412) (His tag)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	TGFB3
Protein Characteristics:	AA 24-412
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TGFB3 protein is labelled with His tag.

Product Details

Sequence:	Leu 24-Ser 412
Characteristics:	A DNA sequence encoding the Rat TGF-beta 3/TGFB3 protein (Q07258) (Leu 24-Ser 412) was expressed with N-His tag.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	TGFB3
Alternative Name:	TGF-beta 3 (TGFB3 Products)
Background:	Abbreviation: TGF-beta 3,TGFB3 Target Synonym: ARVD,ARVD1,LDS5,RNHF,TGFbeta 3,transforming growth factor beta-3 Background: TGF?-beta 3 (transforming growth factor-beta 3) is a member of a TGF?-beta superfamily subgroup that is defined by their structural and functional similarities. TGF-beta 3

Target Details

and its closely related proteins, TGF-beta 1 and ? beta 2, act as cellular switches to regulate immune function, cell proliferation, and epithelial-?mesenchymal transition. The non-redundant biological effects of TGF-? beta 3 include involvement in palatogenesis, chondrogenesis, and pulmonary development. Rat TGF?-beta 3 cDNA encodes a 412 amino acid (aa) precursor that contains a 23 aa signal peptide and a 389 aa proprotein. TGF-beta 3 is secreted as a latent complex. This latent form of TGF-beta 3 is activated by integrins, thrombospondin-1, plasmin, and matrix metalloproteases. It can also be activated by extreme pH and reactive oxygen species. TGF-beta 3 binds with high affinity to TGF-beta RII, a type II serine/threonine kinase receptor. This receptor then phosphorylates and activates type I serine/threonine kinase receptors, TGF-? beta RI or ALK-?1, to modulate transcription through Smad phosphorylation. The divergent biological effects exerted by individual TGF-beta isoforms is dependent upon the recruitment of co-receptors (TGF-? beta RIII and endoglin) and the subsequent initiation of Smad--dependent or -independent signaling pathways.

Molecular Weight:	Calculated MW: 42.68 kDa Observed MW: 50 kDa
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UniProt:	Q07258
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Pathways:	Cell-Cell Junction Organization , Production of Molecular Mediator of Immune Response , Protein targeting to Nucleus
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
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Expiry Date:	12 months
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