

pro-TGF-beta 1, His-tag

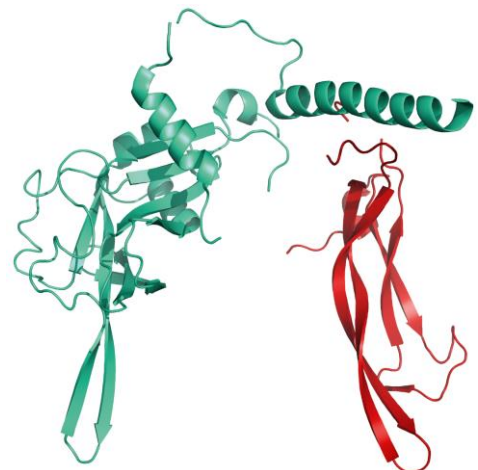
Cat. no. P2020-115

Product Information

Protein:	pro-TGF-beta 1, His-tag (~ 44.9 kDa)
Uniprot#:	P01137
Sequence:	MELVKKRKRIEAIRGQILSKLRLASPPSQGEVPPG PLPEAVLALYNSTRDRVAGESAEPEPEPEADYYAKEVTRVLMVETHNEIYDKFKQSTHSI YMFNTSELREAVPEPVLLSRAELRLLRLKLVQHVLYQKYSNNSWRYSNRL LAPSD SPEWLSFDVTGVVRQWLSRGGEIEGFRLSAHCSDSRDNTLQVDINGFTTGRRGLATIH GMNRPFLLL MATPLERAQHLQSSRHRRALDTNYCFSSTEKNCCVRQLYIDFRKDLGWKWI HEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNP GASAAPCCVPQALEPLPIVYVVG RKPKEQLSNMIVRSCKCS
	Methionine at pos. 1 present due to cloning constraints, N-terminal His-tag not shown in sequence.
Source:	Recombinantly expressed in HEK293 cells.
Tag(s):	His-tag, N-terminal
Purification:	Purified by affinity chromatography and subsequent buffer exchange.
Formulation:	PBS; pH 7.4. Liquid, stored and shipped at -80 °C.
Purity:	> 95 % (will be determined by densitometry of Coomassie stained gel, example next page)
Concentration:	Will be determined by BCA-Assay.
Long-term storage:	No recommendations.
Comment:	Pro-TGF-beta 1 consists of the latency associated peptide (LAP) and the mature transforming growth factor (TGF)-beta 1 together forming the small latent complex (SLC). This results in three distinct protein bands in SDS-PAGE as illustrated on page 2.

Background Information:

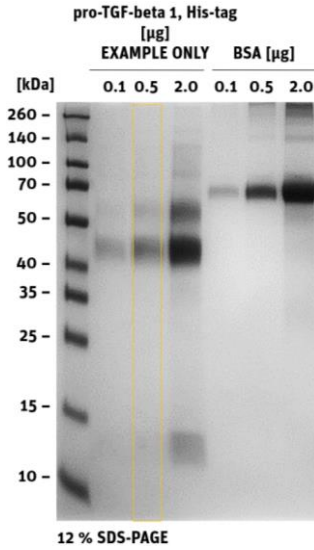
Transforming growth factor beta 1 (TGF- β 1) belongs to the transforming growth factor beta superfamily of cytokines and is involved in a myriad of cellular functions including the control of cell growth, cell proliferation, cell differentiation, and apoptosis. The transforming growth factor beta-1 is synthesized as precursor consisting of the latency-associated peptide (LAP, 249 aa) and the transforming growth factor beta 1 (112 aa). The precursor is also named small latent complex (SLC) or latent TGF- β 1. The precursor proprotein is cleaved in the Golgi apparatus by Furin, but the disulfide-linked homodimers of LAP and TGF-beta 1 remain non-covalently associated after secretion.



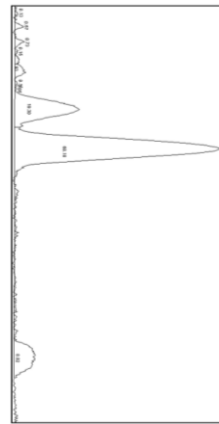
Structural model of pro-TGF-beta 1, His-tag

Product Information

Quality Information (provided for each lot):



SDS-PAGE/Coll.Coomassie



	Area	Percent
4	41.485	0.154
5	518.113	1.927
6	39.192	0.146
7	13.536	0.050
8	5189.154	19.302
9	18329.246	68.178
10	2371.154	8.820

Histogram (of marked lane in gel picture)

SDS-PAGE running behavior of SLC:

