

## Latent TGF beta 1/TGFB1 Protein, Human (C33S, HEK293, His)

Cat. No.:	HY-P70236
Synonyms:	rHuLatent TGF Beta-1-C33S, His; Transforming Growth Factor Beta-1; TGF-Beta-1; Latency-Associated Peptide; LAP; TGFB1; TGFB
Species:	Human
Source:	HEK293
Accession:	P01137 (L30-S390,C33S)
Gene ID:	7040
Molecular Weight:	38-55&13 kDa

### PROPERTIES

AA Sequence	<pre> LSTSKTIDME   LVKRRKRIEAI   RGQILSKLRL   ASPPSQGEVP PGPLPEAVLA   LYNSTRDRVA   GESAEPEPEP   EADYYAKEVT RVLMEVETHNE  IYDKFKQSTH   SIYMFNTSE    LREAVPEPVL LSRAELRLLR   LKLVQEHVE    LYQKYSNNSW   RYLSNRL LAP SDSPEWLSFD   VTGVVRQWLS   RGGIEGFRL    SAHCSCDSRD NTLQVDINGF   TTGRRGDLAT   IHGMNRPFL    LMATPLERAQ HLQSSRHRRA   LDTNYCFSST   EKNCCVRQLY   IDFRKDLGWK WIHEPKGYHA   NFCLGPCPYI   WSLDTQYSKV   LALYNQHNP ASAAPCCVPQ   ALEPLPIVYY   VGRKPKVEQL   SNMIVRSCKC S </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	Latent TGF beta 1/TGFB1 Protein promotes fibrillin-1 and -2 assembly downstream of fibronectin in mouse embryonic fibroblasts <sup>[3]</sup> .
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Latent TGF beta 1/TGFB1 Protein promotes esophageal squamous cell carcinoma progression through epithelial-mesenchymal transition and cancer-associated fibroblasts transformation.<sup>[4]</sup>  
Latent TGF beta 1/TGFB1 Protein plays a potential bridge between depressive disorder and glioblastoma<sup>[5]</sup>.

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## REFERENCES

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- [1]. J Taipale, et al. Latent transforming growth factor-beta 1 associates to fibroblast extracellular matrix via latent TGF-beta binding protein. *J Cell Biol.* 1994 Jan;124(1-2):171-81.
- [2]. C Unsöld, et al. Latent TGF-beta binding protein LTBP-1 contains three potential extracellular matrix interacting domains. *J Cell Sci.* 2001 Jan;114(Pt 1):187-197.
- [3]. Matthias Przyklenk, et al. LTBP1 promotes fibrillin incorporation into the extracellular matrix. *bioRxiv.* 2022.
- [4]. Rui Cai, et al. LTBP1 promotes esophageal squamous cell carcinoma progression through epithelial-mesenchymal transition and cancer-associated fibroblasts transformation. *J Transl Med.* 2020 Mar 26;18(1):139.
- [5]. Xiaojun Fu, et al. LTBP1 plays a potential bridge between depressive disorder and glioblastoma. *J Transl Med.* 2020 Oct 15;18(1):391.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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