

PRODUCT INFORMATION

Croyez GMP® TGF beta 1 (Transforming growth factor beta 1), Human

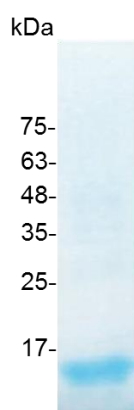
Catalog number	C01088-GMP-100 / C01088-GMP-1000
Package	100 µg / 1 mg
Description	Transforming growth factor beta 1 (TGF beta 1) is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation, and apoptosis. In humans, TGF-β1 is encoded by the TGFB1 gene.
Source	<i>Escherichia coli</i> Animal-free reagent and laboratory Manufactured and tested under GMP guideline
Sequence	MALDTNYCFSSTEKNCCVRQLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIW SLDTQYSKVLALYNQHNP GASAAPCCVPQALEPLPIVYYVGRKPKVEQLSNMIV RSCKCS with polyhistidine tag at the C-terminus
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to inhibit the IL-4 dependent proliferation in HT-2 cells. The ED ₅₀ for this effect is <0.1 ng/mL. The specific activity of recombinant human TGF beat 1 is approximately >5 x 10 ⁷ IU/mg. Measure by its ability to induce proliferation in MCF-7 cells The ED ₅₀ for this effect is <3.2 ng/mL.
Purity	>98% as determined by SDS-PAGE. Purified by Ni-NTA chromatography.
Formulation	The protein was lyophilized from a solution containing 1X PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ O to a concentration not less than 100 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved. In some experiments, it recommends to add 10 mM HCl when reconstitute lyophilized protein.
Storage	Lyophilized protein should be stored at -20°C. This product is stable for one year upon receipt, when handled and stored as instructed. Upon reconstitution, protein aliquots should be stored at -20°C or -80°C. Avoid repeated freeze/thaw cycles.
Note	Please use within one month after protein reconstitution.
Specification	Croyez GMP® recombinant proteins are manufactured in ISO 13485:2016 and

GMP-certified facility. The processes include:

- Testing and traceability of raw material
- Records of the maintenance and equipment calibration
- Personnel training records
- Batch-to-batch consistency
- Documentation of QA control and process changes
- Manufactured and tested under an ISO 13485:2016 certified quality management system
- Stability monitor of product shelf-life

Reference

1. Khalil N. (1999) *Microbes Infect.* 1,15: 1255-63.
2. Kim KK. et al. (2018) *Cold Spring Harb Perspect Biol.* 10,4: a022293.
3. Wang XJ. et al. (2006) *J Investig Dermatol Symp Proc.* 11,1: 112-7..



SDS-PAGE analysis of Croyez GMP[®] TGF beta 1, Human

For Research Use Only. Not for use in diagnostic or therapeutic procedures.