

Technical Data Sheet

Recombinant human TGF- β 3 protein



bioxcell.com

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

Lot Specific Information

Lot Number: Lot Specific*

Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Shelf Life

This product has a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended.

Product Website Link: <https://bioxcell.com/recombinant-human-tgf-beta-3-protein-rp015>

Product Information

Catalog Number:	RP015
Protein Identity:	Confirmed identity with expected mass, determined by mass spectrometry
Recommended Dilution Buffer:	InVivoPure Reconstitution Buffer A
Formulation:	Lyophilized, white powder
Endotoxin:	≤ 0.5 EU/mg, LAL assay
Purity:	$\geq 95\%$; SDS-PAGE
Reconstitution:	Resuspend in 10 mM HCl (Reconstitution solution A) at >50 μ g/ml. Once reconstituted, store in single-use aliquots to avoid freeze-thaw cycles. Store reconstituted protein at -20 $^{\circ}$ C to -80 $^{\circ}$ C for a maximum of 12 months or until the expiry date if sooner.
Sterility:	Sterile
Production:	Microbial. Expressed in E. coli
Molecular Weight:	12.7 kDa (monomer) 25.4 kDa (dimer)
Bioactivity Assay:	No significant difference between EC ₅₀ of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human TGF- β 3 protein (transforming growth factor beta 3) is a member of the TGF- β family and superfamily that, like TGF- β 1 and TGF- β 2, signals through Type I and Type II serine/threonine kinase receptor complexes to activate intracellular SMAD transcription factors and regulate cell survival, proliferation and differentiation. TGF- β 3 has isoform-specific roles in embryonic palate fusion and wound healing and is widely used in human pluripotent stem cell maintenance. It is a component of the low-cost, weekend-free B8 iPSC medium developed by the Burridge lab, where TGF- β 3 maintains iPSCs at concentrations as low as 0.1 ng/ml, compared with 2 ng/ml for TGF- β 1, making recombinant TGF- β 3 a cost-effective alternative for stem cell culture. This protein is optimized for in vivo and functional applications: low-endotoxin, tag-free, and carrier-free, supporting reproducible performance in demanding preclinical and bioactivity studies. Species reactivity: human. Species similarity: mouse - 100%, rat - 99%, bovine - 99%, porcine - 98%.

Storage

Store at the stock concentration at 4 $^{\circ}$ C. **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Store lyophilized protein between -20 $^{\circ}$ C and -80 $^{\circ}$ C until the date of expiry. Avoid freeze-thaw cycles

Bio X Cell, LLC
<https://bioxcell.com>

*Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.
Not for resale.*

+1-866-787-3444
customerservice@bioxcell.com

**Bio X Cell, Bio X Cell logo, and all other trademarks are the property
of Bio X Cell, LLC © Bio X Cell, LLC**