

Technical Data Sheet

Recombinant human activin E



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-activin-e-rp019>

Product Information

Catalog Number:	RP019
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:	≥95%; SDS-PAGE
Reconstitution:	Resuspend in 10 mM HCl (Reconstitution solution A) at >50 µg/ml. Once reconstituted, store in single-use aliquots to avoid freeze-thaw cycles. Store reconstituted protein at -20 °C to -80 °C for a maximum of 12 months or until the expiry date if sooner.
Sterility:	Sterile
Production:	Microbial. Expressed in E. coli
Molecular Weight:	23.2 kDa (dimer)
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human activin E PLUS™ protein is a dimeric member of the TGF-beta superfamily, formed from two disulfide-linked subunits with the characteristic cystine-knot motif, that regulates cell growth, differentiation and inflammation. Primarily expressed in the liver and also detected in adipose tissue and the gastrointestinal tract, activin E signals through the ALK7 receptor together with ActRIIA and ActRIIB while resisting antagonists such as follistatin, activating the SMAD2/3 pathway in adipocytes. Through its role in glucose and lipid metabolism, adipose regulation, insulin sensitivity and thermogenesis, activin E is a promising target for obesity, diabetes and metabolic disease, and blocking activin E is being explored as an anti-diabetic strategy. Activin E also shares activin functions such as enhancing FSH binding in the ovarian follicle, promoting spermatogenesis and supporting androgen synthesis, making recombinant activin E a versatile reagent for metabolism, endocrinology and inflammation research. 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 - 98%, rat - 98%, bovine - 95%, porcine - 94%.

Storage

Store at the stock concentration at 4°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 °C and -80 °C until the date of expiry. Avoid freeze-thaw cycles

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

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procedures.

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