

Technical Data Sheet

Recombinant human EGF protein



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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-egf-protein-rp005>

Product Information

Catalog Number:	RP005
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:	6.3 kDa
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human EGF protein (epidermal growth factor) is a member of the human EGF family that binds high-affinity EGF receptors (EGFRs), driving receptor dimerization and clustering and activating downstream PI3K, ERK1/2, JAK/STAT, β-catenin and calcium signaling pathways. EGF is a powerful stimulator of cell proliferation and differentiation and is used extensively in induced pluripotent stem cell (iPSC) and embryonic stem cell (ESC) culture for the expansion and differentiation of epithelial, neural, mesoderm and hematopoietic lineages, as well as for differentiating mesenchymal stem cells (MSCs) into bone-forming cells. As a core component of many organoid media alongside R-spondin 1, noggin or gremlin, Wnt3a and FGF-10, recombinant EGF is widely applied to establish and maintain intestine, stomach, liver, pancreas, brain and cancer organoids, making it an essential growth factor for stem cell and organoid 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 - 74%, rat - 74%, porcine - 85%.

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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