Technical Data Sheet

Recombinant human/mouse FGF-4 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 Information

Catalog Number:	**RP034**
Protein Identity:	Confirmed identity with expected mass, determined by mass spectrometry
Reported Applications:	Hindgut organoids from iPSC-derived human posterior gut endoderm cells Neural stem cell proliferation and neuronal differentiation
Formulation:	Lyophilized, white powder
Endotoxin:	≤0.5 EU/mg, LAL assay
Purity:	≥95%; SDS-PAGE
Reconstitution:	Resuspend in sterile-filtered water 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:	14 kDa
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human/mouse FGF-4 protein (fibroblast growth factor 4) is a member of the FGF superfamily with a physiological role in regulating the proliferation and differentiation of embryonic stem cells and tissue stem cells. Recombinant FGF-4 promotes neural stem cell proliferation and neuronal differentiation in the postnatal brain, increases the proliferation rate of human adult bone marrow-derived mesenchymal stem cells, and supports the maintenance, proliferation and self-renewal of human embryonic stem cells. Acting in synergy with WNT signaling, FGF-4 drives the formation of hindgut organoids from iPSC-derived human posterior gut endoderm, and it is used to mimic embryonic intestinal development during the directed differentiation of pluripotent stem cells into intestinal organoids, making it a key reagent for stem cell, neural and intestinal 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. A GMP-grade version of this protein is available for cell and gene therapy manufacturing. Contact us at customerservice@bioxcell.com for details. Species reactivity: human. Species similarity: mouse - 91%, rat - 80%, bovine - 90%, porcine - 91%.

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

Bio X Cell, LLC

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

https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com

Not for resale.
Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © Bio X Cell, LLC