

Technical Data Sheet

Recombinant human/mouse FGF-8b 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-fgf-8b-protein-rp016>

Product Information

Catalog Number:	RP016
Protein Identity:	Confirmed identity with expected mass, determined by mass spectrometry
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:	22.5 kDa
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human FGF-8b protein is a 22.5 kDa, 194-amino-acid heparin-binding isoform of FGF-8 within the fibroblast growth factor (FGF) family, originally identified as a growth factor for androgen-dependent mouse mammary carcinoma. Of the four human FGF-8 isoforms (a, b, e and f), FGF-8b shows the strongest receptor affinity and oncogenic capacity, with human and murine FGF-8a and FGF-8b sharing 100% homology. Containing a conserved heparin-binding domain essential for bioactivity, FGF-8b binds FGF receptors to activate the Ras/MAPK pathway and drives cell proliferation, differentiation, survival and apoptosis. It is a key regulator of embryonic development and epithelial-mesenchymal transitions, patterning the brain, eye, ear, limb and heart, and it transforms the midbrain into cerebellum in transgenic models. In cell culture, FGF-8b promotes neurite outgrowth and neural regeneration and, combined with Shh and transcription factors, is used to generate dopaminergic neurons and iPSC-derived ventral midbrain organoids for 3D neuronal 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. Human and murine FGF-8a and FGF-8b show 100% homology.

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

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

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