

Technical Data Sheet

Recombinant human FGF-8a 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-fgf-8a-protein-rp018>

Product Information

Catalog Number:	RP018
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:	21.3 kDa
Bioactivity Assay:	No significant difference between EC50 of reference and test lots
Mycoplasma:	Negative

Description

Recombinant human FGF-8a protein is a 21.3 kDa, 182-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. Among the four human FGF-8 isoforms (a, b, e and f), human and murine FGF-8a and FGF-8b share 100% homology. Its conserved heparin-binding domain anchors FGF-8a to cell-surface heparan sulfate proteoglycans and is essential for bioactivity; FGF-8a binds FGF receptors to activate the Ras/MAPK pathway and regulate cell proliferation, differentiation, survival and apoptosis. FGF-8a is a key player in prenatal development and epithelial-mesenchymal transitions, patterning the brain, eye, ear, limb and heart, and it is specifically required for morphogenesis and neurogenesis, with FGF-8a expanding the midbrain in transgenic models. In cell culture, recombinant FGF-8a is used to generate ESC- and iPSC-derived ventral midbrain dopaminergic neurons and to support neuronal induction and neurite outgrowth, making it a valuable reagent for neural differentiation 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; 98% identity with human/murine FGF-8e and FGF-8f.

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**