

Recombinant Rat bFGF/FGF-2 Protein

Product Information

Product Name	Cat#	Size
Recombinant Rat bFGF/FGF-2 Protein	91324ES10	10 µg
	91324ES60	100 µg
	91324ES76	500 µg

Product Description

FGF basic, also known as FGF-2 and HBGF-2, is a member of the FGF superfamily of mitogenic proteins which show 35-60% amino acid conservation. Human FGF acidic shares 54% amino acid (aa) sequence identity with FGF basic and 17%-33% with other human FGFs. It shares 92%, 96%, 96%, and 96% aa sequence identity with bovine, mouse, porcine, and rat FGF acidic, respectively, and exhibits considerable species crossreactivity. Alternate splicing generates a truncated isoform of human FGF acidic that consists of the N-terminal 40% of the molecule and functions as a receptor antagonist. The effects of androgen and FGF-2 could be partly reversed with a specific anti-FGF-2 immunoglobulin G or by suramin, which inhibits binding of FGFs to their high affinity receptors. Additionally, bFGF is frequently used for a critical component of cell culture medium, human embryonic stem cell culture medium, serum-free culture systems.

Product Properties

Synonyms	bFGF, FGF basic, FGF2, FGF-2, fibroblast growth factor 2 (basic), HBGF-2, Prostatropin
Accession	P13109
GeneID	54250
Source	E.coli-derived rat FGF, Pro10-Ser154, with an N-terminal Met.
Molecular Weight	Approximately 16.4 kDa.
AA Sequence	MPALPEDGGG AFPPGHFKDP KRLYCKNGGF FLRIHPDGRV DGVREKSDPH VKLQLQAEER GVVSIKGVCA NRYLAMKEDG RLLASKCVTE ECFFFERLES NNYNTYRSRK YSSWYVALKR TGQYKLGSKT GPGQKAILFL PMSAKS
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	>98% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using murine balb/c 3T3 cells is less than 0.2 ng/mL, corresponding to a specific activity of > 5.0 × 10 ⁶ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1 µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C for 1 year.

1 month, 2 to 8 °C under sterile conditions after reconstitution.

3 months, -20 °C under sterile conditions after reconstitution.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.