

Datasheet for 009-F01-U84-1000**rHuman FGF154 basic Protein****Overview**

Description:	Human Fibroblast Growth Factor 154 basic Recombinant Protein (Animal Free) - 009-F01-U84-1000
Item No.:	009-F01-U84-1000
Size:	1 mg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Basic fibroblast growth factor (bFGF), also known as FGF2, is expressed by endothelial cells and is a mediator of angiogenesis. bFGF also has cardioprotective functions during heart injury. The application of bFGF is a critical component for embryonic stem cell culture systems and is necessary for maintaining cells in an undifferentiated state. Recombinant bFGF-154aa is the full length bFGF protein encoded by the human FGF2 gene. There are no detectable differences in biological activity between bFGF-154aa and the truncated bFGF-147aa proteins. bFGF is a monomer with a total molecular weight of 17.2 kDa.
Synonyms:	Heparin-binding growth factor 2 (HBGF-2), Prostatropin, Basic fibroblast growth factor (bFGF)
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	FGF2
Purity/Specificity:	Fibroblast Growth Factor is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 97% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-PAGE.

Relevant Links: • [UniProtKB - P09038](#)

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Fibroblast Growth Factor 154 basic Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Fibroblast Growth Factor 154 basic in immunological assays. Lyophilized from 10 mM sodium phosphate, 75 mM sodium chloride, pH 7.5.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is determined by the dose-dependent proliferation of mouse BALB/c 3T3 cells and is typically less than 1 ng/mL.

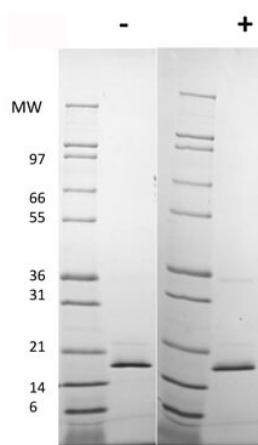
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

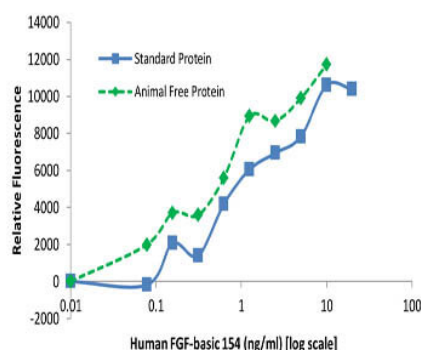
Images



SDS-PAGE

SDS-PAGE of Human Fibroblast Growth Factor 154 Animal Free basic Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human FGF154-basic AF in non-reducing conditions (-). Lane 3: Molecular weight marker. Lane 4: 1 µg Human FGF154-basic AF in reducing conditions (+). Human FGF154 basic AF has a predicted MW of 17.2 kDa.

Human AF FGF-Basic 154 Bioactivity Data



SDS-PAGE

Bioactivity of Human Fibroblast Growth Factor 154 basic Animal Free Recombinant Protein. Serial dilutions of Human AF FGF Basic 154, starting at 20 ng/mL, were added to NIH 3T3 cells. Cell proliferation was measured after 48 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human AF FGF Basic is 0.64-0.96 ng/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.