

Datasheet for 009-001-U76-0005**rHuman FGF-4 Protein****Overview**

Description:	Human Fibroblast Growth Factor-4 Recombinant Protein - 009-001-U76-0005
Item No.:	009-001-U76-0005
Size:	5 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Fibroblast Growth Factor 4 (FGF-4) is a growth factor predominantly expressed during embryonic development, playing a key role in limb development. In culture, FGF-4 has been shown to be an important regulator of growth for stem cells, fibroblasts and endothelial cells. Unglycosylated FGF-4 is N-terminally cleaved into 13 kDa or 15 kDa proteins that are more active than the precursor 19 kDa protein, Bellosa P, et al. (1993). Human FGF-4 shares high homology and cross-reactivity with the mouse protein. Recombinant human FGF-4 is a non-glycosylated protein containing 140 amino acids, with a total molecular weight of 15 kDa.
Synonyms:	Transforming protein KS3, Heparin-binding growth factor (HBGF-4), Heparin secretory-transforming protein 1 (HST-1)
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	FGF4
Purity/Specificity:	Fibroblast Growth Factor-4 purity was determined to be greater than 98% as determined by analysis by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P08620

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Fibroblast Growth Factor-4 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-4 in immunological assays. Lyophilized in 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 its ability to induce the proliferation of mouse NR6R-3T3 fibroblasts and is typically 0.25-1.25 ng/mL.

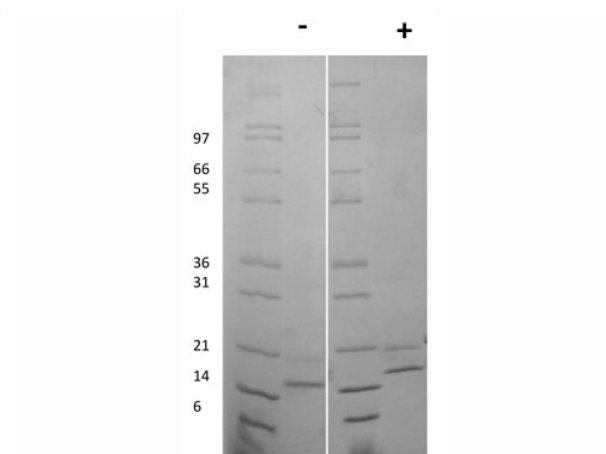
Formulation

Physical State:	Lyophilized
Buffer:	See application note.
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	5 μ l (5-50 μ l)
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

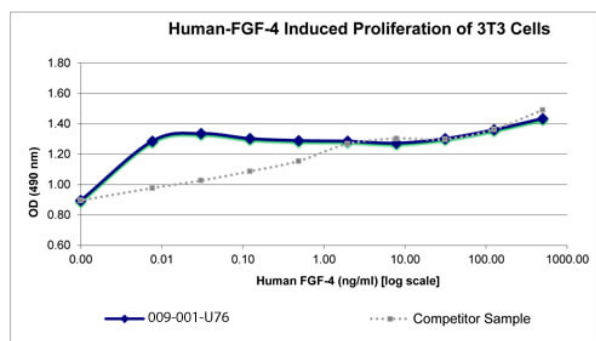


SDS-PAGE

SDS-PAGE of Human Fibroblast Growth Factor-4 Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human FGF-4 in non-reducing conditions (-). Lane 3: Molecular weight marker. Lane 4: 1 µg Human FGF-4 in reducing conditions (+). Human FGF-4 is predicted to have a MW of 19 kDa.

SDS-PAGE

Bioactivity of Human Fibroblast Growth Factor-4 Recombinant Protein. 3T3 cells were cultured with 0 to 1 µg/mL Human FGF-4. Cell proliferation was measured after 42 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human FGF-4 is less than 0.1 ng/mL. This value is comparable to the competitor sample and to the expected range of 0.25-1.25 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.