ABclonal®

Recombinant Human FGF-18 Protein

Catalog No.: RP01827 Recombinant

Sequence Information

Species Gene ID Swiss Prot HEK293 cells 8817 O76093

Tags C-His

Synonyms

ZFGF5; FGF-18; FGF18

Product Information

Source Purification

HEK293 cells ≥ 95 % as determined by

SDS-PAGE.

Endotoxin

 $< 0.1 \; \text{EU/}\mu\text{g}$ of the protein by LAL method.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

www.abclonal.com

Background

Fibroblast growth factor 18 (FGF18) is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth, and invasion. It has been shown in vitro that FGF18 is able to induce neurite outgrowth in PC12 cells. Studies of the similar proteins in mouse and chick suggested that this protein is a pleiotropic growth factor that stimulates proliferation in a number of tissues, most notably the liver and small intestine. Experiment datas identified FGF18 as a selective ligand for FGFR3 in limb bud mesenchymal cells, which suppressed proliferation and promoted their differentiation and production of cartilage matrix. FGF18 appears to regulate cell proliferation and differentiation positively in osteogenesis and negatively in chondrogenesis.

Basic Information

Description

Recombinant Human FGF-18 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Glu28-Ala207) of human FGF-18 (Accession #NP 003853.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human FGF18(Catalog: RP01827) at 10 μ g/mL (100 μ L/well) can bind Human FGFR4 (Catalog: RP00130) with a linear range of 27.4-393.3 ng/mL.

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

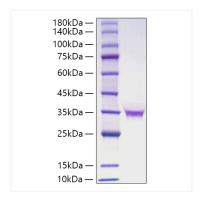
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

^{*} For your safety and health, please wear a lab coat and disposable gloves when handling.

Validation Data



Recombinant Human FGF-18 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.