

Mouse FGFR1 / FGFR5 Protein (His Tag)

Catalog Number: 50182-M08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

FGFR5; FHFR; FGFR5; FGFR5beta; FGFR5gamma

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse FGFR1 (NP_473412.1) (Met 1-Pro 374) precursor was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA . 1. Immobilized mouse at 10 µg/ml (100 µl/well) can bind mouse FGFR5. The EC₅₀ of mouse FGFR5 is 0.34 µg/ml . 2. Immobilized human FGF1 at 10 µg/ml (100 µl/well) can bind mouse FGFR5 with a linear range of 0.08-2 µg/ml . 3. Immobilized human bFGF at 5 µg/ml (100 µl/well) can bind mouse FGFR5. The EC₅₀ of mouse FGFR5 is 0.22 µg/ml .

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ala 21

Molecular Mass:

The secreted recombinant mouse FGFR1 consists of 365 amino acids and has a calculated molecular mass of 40.4 kDa. The apparent molecular mass of rmFGFR1 is approximately 55-60 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

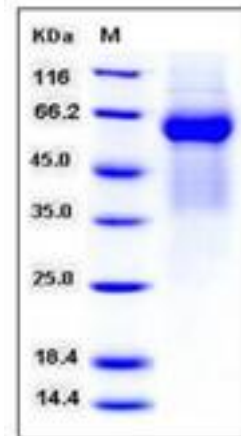
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Fibroblast growth factor receptor-like 1 (FGFR1) also known as Fibroblast growth factor receptor 5 (FGFR5), is a member of the fibroblast growth factor receptor (FGFR) family, where amino acid sequence is highly conserved between members and throughout evolution. A full-length representative protein would consist of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. A unique feature of FGFR1/FGFR5 is that it does not contain an intracellular tyrosine kinase domain. Some muscle types, including the muscles of the tongue and the diaphragm, express FGFR1/FGFR5 at relatively high level. In contrast, the heart and the skeletal muscles of the limbs, as well as many other organs (brain, lung, liver, kidney, gut) express Fgfr1 only at basal level. It is conceivable that FGFR1/FGFR5 interacts with other Fgfrs, which are expressed in cartilage and muscle, to modulate FGF signaling.

References

1. Wiedemann M, *et al.* (2000) Characterization of a novel protein (FGFR1) from human cartilage related to FGF receptors. *Genomics*. 69(2): 275-9.
2. Trueb B, *et al.* (2006) Expression of FGFR1, a novel fibroblast growth factor receptor, during embryonic development. *Int J Mol Med*. 17(4): 617-20.
3. Wiedemann M, *et al.* (2001) The mouse Fgfr1 gene coding for a novel FGF receptor-like protein. *Biochim Biophys Acta*. 1520(3): 247-50.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>