

Mouse FSTL1 Protein (His Tag)

Catalog Number: 51127-M08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

AI316791; AW107808; Fstl; TSC-36

Protein Construction:

A DNA sequence encoding the mouse FSTL1 (NP_032073.2) (Met1-Ile306) was expressed with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

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: Glu 19

Molecular Mass:

The recombinant mouse FSTL1 comprises 299 amino acids and has a predicted molecular mass of 33.9 kDa. The apparent molecular mass of the protein is approximately 44.9 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:

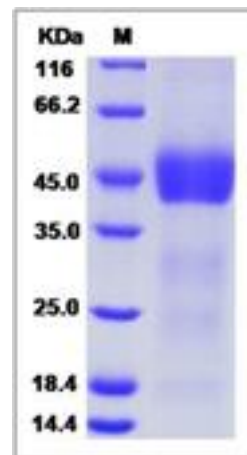
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Follistatin-related protein 1 (FSTL1) is an extracellular glycoprotein whose functional significance in physiological and pathological processes is incompletely understood. Recently, we have shown that FSTL1 acts as a muscle-derived secreted factor that is up-regulated by Akt activation and ischemic stress and that FSTL1 exerts favorable actions on the heart and vasculature. Here, we sought to identify the receptor that mediates the cellular actions of FSTL1. It contains an FS module, a follistatin-like sequence containing 10 conserved cysteine residues. FSTL1 is thought to be an autoantigen associated with rheumatoid arthritis. DIP2A functions as a novel receptor that mediates the cardiovascular protective effects of FSTL1. Experiment results have provided in vivo and in vitro evidence to demonstrate that Fstl1 modulates lung development and alveolar maturation, in part, through BMP4 signaling.

References

1. Rosenberg MI, *et al.* (2006) MyoD inhibits Fstl1 and Utn expression by inducing transcription of miR-206. *J Cell Biol.* 175(1): 77-85.
2. Ouchi N, *et al.* (2010) DIP2A functions as a FSTL1 receptor. *J Biol Chem.* 285(10): 7127-34.
3. Geng Y, *et al.* (2011) Follistatin-like 1 (Fstl1) is a bone morphogenetic protein (BMP) 4 signaling antagonist in controlling mouse lung development. *Proc Natl Acad Sci U S A.* 108(17): 7058-63.

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

For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>