

Human AIMP1 / EMAP2 / SCYE1 Protein (His Tag)

Catalog Number: 10623-H07E



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

AIMP1, EMAP2, EMAP2, SCYE1, p43

Protein Construction:

A DNA sequence encoding the native human SCYE1 (NP_004748.2) (Ala 2-Lys 312) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 97 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

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

Predicted N terminal: Met 1

Molecular Mass:

The recombinant human SCYE1 consisting of 318 amino acids and migrates as an 35 kDa band in SDS-PAGE under reducing conditions as predicted.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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

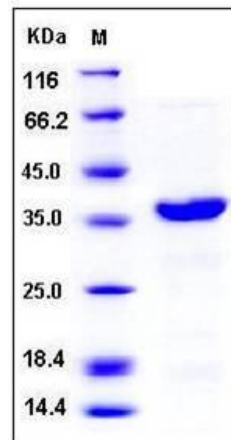
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Aminoacyl tRNA synthase complex-interacting multifunctional protein 1, also known as Multisynthase complex auxiliary component p43, Endothelial monocyte-activating polypeptide II, AIMP1, EMAP2 and SCYE1, is a nucleus protein which contains onetRNA-binding domain. AIMP1 is a non-catalytic component of the multisynthase complex. AIMP1 negatively regulates TGF-beta signaling through stabilization of SMURF2 by binding to SMURF2 and inhibiting its SMAD7-mediated degradation. AIMP1 is involved in glucose homeostasis through induction of glucagon secretion at low glucose levels. AIMP1 stimulates the catalytic activity of cytoplasmic arginyl-tRNA synthase. It binds tRNA and possesses inflammatory cytokine activity. It promotes dermal fibroblast proliferation and wound repair and regulates KDEL1-mediated retention of HSP90B1/gp96 in the endoplasmic reticulum. AIMP1 plays a role in angiogenesis by inducing endothelial cell migration at low concentrations and endothelial cell apoptosis at high concentrations and induces maturation of dendritic cells and monocyte cell adhesion. AIMP1 modulates endothelial cell responses by degrading HIF-1A through interaction with PSMA7.

References

1. Park S.G. et al., 1999, J. Biol. Chem. 274: 16673-6.
2. Shalak V. et al., 2001, J. Biol. Chem. 276: 23769-76.
3. Park S.G. et al., 2002, J. Biol. Chem. 277: 45243-8.
4. Park H. et al., 2002, J. Leukoc. Biol. 71: 223-30.
5. Tandle A.T. et al., 2009, Exp. Cell Res. 315: 1850-9.