

## AIMP1

### Recombinant Human AIMP1 / EMAP-2 / SCYE1 (His Tag)

<b>Catalog No.</b>	CRH526A-His CRH526B-His CRH526C-His	<b>Quantity:</b>	50 µg 100 µg 1.0 mg
<b>Alternate Names:</b>	Aminoacyl tRNA synthase complex-interacting multifunctional protein 1, Multisynthase complex auxiliary component p43, Endothelial monocyte-activating polypeptide 2, EMAP-2, Small inducible cytokine subfamily E member 1		
<b>Description:</b>	Aminoacyl tRNA synthase complex-interacting multifunctional protein is a nucleus protein which contains one tRNA-binding domain. AIMP1 (also known as p43) is a factor associated with a macromolecular aminoacyl-tRNA synthetase (ARS) complex but also plays diverse regulatory roles in various physiological processes. AIMP1 negatively regulates TGF-beta signaling via stabilization of Smurf2. It suggests the novel activity of AIMP1 as a component of negative feedback loop of TGF-beta signaling. Recently, it has been demonstrated that AIMP1 is also secreted and acts as a novel pleiotropic cytokine. AIMP1 protein induces the maturation and activation of DCs, which skew the immune response toward a Th1 response. AIMP1 is known as a cytokine working in the control of angiogenesis, inflammation, and wound healing. AIMP1 is secreted from the pancreas upon glucose starvation, and it also plays a glucagon-like role in glucose homeostasis. Although AIMP1 was identified as a component of the macromolecular aminoacyl tRNA synthetase complex involved in the cellular translation process, it was also found to be secreted as a cytokine having complex physiological functions. Among these, AIMP1's angiostatic and immune stimulating activities suggest its potential use as a novel antitumor therapeutic protein. AIMP1 may exert its antitumor activity by inducing tumor-suppressing cytokines.		
<b>UniProt ID:</b>	Q12904		
<b>Accession Number:</b>	NP_004748.2		
<b>Protein Construction:</b>	A DNA sequence encoding the native human SCYE1 (Ala 2-Lys 312) was expressed, with a polyhistidine tag at the N-terminus.		
<b>Source:</b>	E. coli		
<b>Formulation:</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.		
<b>Molecular Weight:</b>	The recombinant human SCYE1 consisting of 318 amino acids and migrates as an 35 kDa band in SDS-PAGE under reducing conditions as predicted.		
<b>Purity:</b>	> 95 % as determined by SDS-PAGE.		
<b>Biological Activity:</b>	Testing in progress		
<b>Predicted N-terminal:</b>	Met 1		



**Reconstitution:**

**Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.

**DO NOT VORTEX.** Allow several minutes for complete reconstitution.

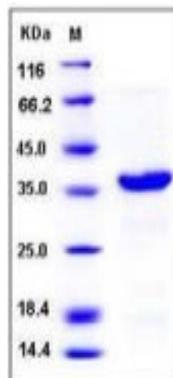
**Storage & Stability:**

Stable for up to 1 year from date of receipt at -20°C to -80°C

After reconstitution, store working aliquots at -20°C to -80°C.

**Avoid repeated freeze-thaw cycles.**

SDS-PAGE



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