Recombinant Mouse Aimp1, His-tagged

Expressed in \textit{E. coli}
Cat. No. Aimp1-549M
Lot. No. (See product label)

**PRODUCT INFORMATION**

**Product Overview:** Recombinant Mouse Aimp1 protein was expressed in \textit{E. coli} with a N-terminal Met and 6-His tag. Ala2-Lys310.

**Description:** Aimp1 is a 23 kDa polypeptide originally identified in the supernatant of TNFα treated Meth A fibrosarcoma cells. In addition to EMAPI/S100C and EMAPIII/VEGF, Aimp1 was one of three molecules presumed to enhance TNFα-induced tissue factor expression on endothelial cells. Pro-EMAPII, otherwise known as p43, is the 310 amino acid (aa) precursor to EMAPII. It is considered to have widespread, if not ubiquitous expression, and is found both intra- and extracellularly. ProAmp1 contains no canonical signal sequence. It does possess a 144 aa N-terminus that is characterized by the presence of two coiled coil regions (aa 6-77) and two heparin-binding motifs (aa 71-73 and 120-122). The C-terminal 166 aa are synonymous with Aimp1.

**Source:** \textit{E. coli}-derived

**Form:** Lyophilized from a 0.2 μm filtered solution in PBS.

**N-terminal Sequence:** Met

**Molecular Weight:** 34.7 kDa

**Activity:** Measured by its ability to induce TNFα secretion by RAW 264.7 mouse macrophages. When mEMAPIII is coated, it will induce TNFα production by RAW 264.7 cells in the presence of Polymyxin B (20 μg/mL) with an ED50 range of 3-10 μg/mL

**Endotoxin Level:** <1.0 EU per 1 μg of the protein by the LAL method.

**Purity:** >95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

**Reconstitution:** 100 μg/mL in sterile PBS.

**Storage:** Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

**GENE INFORMATION**

**Gene Name:** Aimp1 aminoacyl tRNA synthetase complex-interacting multifunctional protein 1 \textit{[Mus musculus]}

**Official Symbol:** Aimp1

**Synonyms:** Aimp1; aminoacyl tRNA synthetase complex-interacting multifunctional protein 1; p43; Emapi2; Scye1; EMAPII; Aimp1/p43; 9830137A06Rik; ARS inducible multifunctional protein 1; endothelial monocyte activating polypeptide 2; multisynthase complex auxiliary component p43; small inducible cytokine subfamily E, member 1; multisynthase complex auxiliary component p43

**GeneID:** 13722

**mRNA Refseq:** NM_007926

**Protein Refseq:** NP_031952

**Chromosome Location:** 3; 3 H2

**Pathway:** Cytosolic tRNA aminoacylation; Gene Expression; mRNA processing; tRNA Aminoacylation

**Function:** cell surface binding; protein homodimerization activity; tRNA binding

**REFERENCES**

