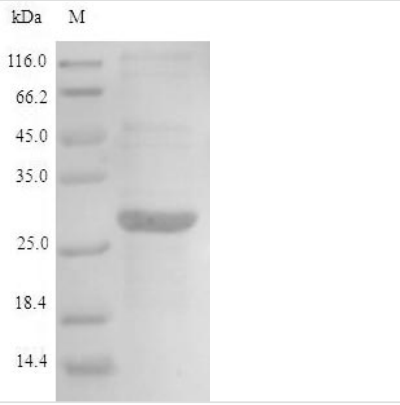
Recombinant Human Aminoacyl tRNA synthase complex-interacting multifunctional protein 2 (AIMP2)

Product Code	CSB-EP618761HU
Relevance	Required for assembly and stability of the aminoacyl-tRNA synthase complex. Mediates ubiquitination and degradation of FUBP1, a transcriptional activator of MYC, leading to MYC down-regulation which is required for aveolar type II cell differentiation. Blocks MDM2-mediated ubiquitination and degradation of p53/TP53. Functions as a proapoptotic factor.
Abbreviation	Recombinant Human AIMP2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q13155
Alias	Multisynthase complex auxiliary component p38 Protein JTV-1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MPMYQVKPYHGGGAPLRVELPTCMYRLPNVHGRSYGPAPGAGHVQEESNLS LQALESRQDDILKRLYELKAAVDGLSKMIQTPDADLDVTNIIQADEPTTLTTNAL DLNSVLGKDYGALKDIVINANPASPPLSLLVLHRLLCEHFRVLSTVHTHSSVKSV PENLLKCFGEQNKKQPRQDYQLGFTLIWKNVPKTQMKFSIQTMCPIEGEGNIA RFLFSLFGQKHNAVNATLIDSWVDIAIFQLKEGSSKEKAAVFRSMNSALGKSP WLAGNELTVADVVLWSVLQQIGGCSVTVPANVQRWMRSCENLAPFNTALKLL K
Research Area	Neuroscience
Source	E.coli
Target Names	AIMP2
Protein Names	Recommended name: Aminoacyl tRNA synthase complex-interacting multifunctional protein 2 Alternative name(s): Multisynthase complex auxiliary component p38 Protein JTV-1
Expression Region	1-320aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	39.3kDa

Protein Length	Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant human AIMP2 protein is a fusion protein consists of the human AIMP2 protein (1-320aa) partnered with the N-terminal 6xHis tag. It was produced in the E.coli. This recombinant AIMP2 protein's purity is greater than 90% determined by SDS-PAGE. After electrophoresis, there is a 30 kDa protein band presented on the gel.

AIMP2 protein encoded by this gene is part of the aminoacyl-tRNA synthetase complex, which contains nine different aminoacyl-tRNA synthetases and three non-enzymatic factors. The encoded protein is one of the non-enzymatic factors and is required for assembly and stability of the complex. AIMP2 had an inhibitory effect on neoplasms, which could increase the tumor necrosis-induced signaling apoptosis. AIMP2 can directly interact with and activate PARP1. Both AIMP2 and α-synuclein are components of Lewy bodies. Likewise, activated PARP1 can regulate several pathological mechanisms in PD, including the aggregation of α-synuclein, mitochondria dysfunction, and mitophagy dysregulation. AIMP2 also inhibits editing by decreasing ADAR protein levels. Recent evidence indicates that PARP1 activation is a necessary early event in DA neuronal cell death induced by 6-OHDA, consistent with the fact that AIMP2-mediated activation of PARP1 is one of the main causes for the loss of DA neurons.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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