AIMP2 Protein, Human (His)

Cat. No.:	HY-P71538
Synonyms:	Aimp2; AIMP2_HUMAN; Aminoacyl tRNA synthase complex-interacting multifunctional protein 2; Aminoacyl tRNA synthetase complex interacting multifunctional protein 2 ; ARS interacting multi functional protein 2 ; JTV 1; JTV 1 protein; JTV1; JTV1 gene; Multisynthase complex auxiliary component p38; Multisynthetase complex auxiliary component p38; P38; PRO0992; Protein JTV 1; Protein JTV-1; tRNA SYNTHETASE COFACTOR p38
Species:	Human
Source:	E. coli
Accession:	Q13155 (1M-320K)
Gene ID:	7965
Molecular Weight:	Approximately 39.3 kDa

PROPERTIES

AA Sequence	M P M Y Q V K P Y H G G G A P L R V E L P T C M Y R L P N V H G R S Y G P A P G A G H V Q E E S N L S L Q A L E S R Q D D I L K R L Y E L K A A V D G L S K M I Q T P D A D L D V T N I I Q A D E P T T L T T N A L D L N S V L G K D Y G A L K D I V I N A N P A S P P L S L L V L H R L L C E H F R V L S T V H T H S S V K S V P E N L L K C F G E Q N K K Q P R Q D Y Q L G F T L I W K N V P K T Q M K F S I Q T M C P I E G E G N I A R F L F S L F G Q K H N A V N A T L I D S W V D I A I F Q L K E G S S K E K A A V F R S M N S A L G K S P W L A G N E L T V A D V V L W S V L Q Q I G G C S V T V P A N V Q R W M R S C E N L A P F N T A L K L L K
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Aminoacyl-tRNA synthetase complex interacting multifunctional protein-2 (AIMP2), which has been reported to cause

selective and age-dependent degeneration of dopaminergic neurons, plays an essential role in the initiation of aSyn fibrillization and LB formation. AIMP2 first self-assembles to form amyloid-like aggregates, which interact with monomeric aSyn and induce its fibrillization in vitro as well as the formation of aSyn fibrils and LB-like inclusions in various well-established cellular and animal models of synucleinopathies. AIMP2 is part of the multiaminoacyl-tRNA synthetase complex, where it acts as a scaffold subunit to stabilize the whole complex. This complex plays a pivotal role in protein biosynthesis by catalyzing the esterification of amino acids with their corresponding tRNA. In this regard, its function suggests that it possess multiple protein-protein interaction surfaces[1].

REFERENCES

[1]. Hilal A Lashuel, et al. Lewy body-associated proteins: victims, instigators, or innocent bystanders? The case of AIMP2 and alpha-synuclein. Neurobiol Dis. 2021 Aug;156:105417.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA