Recombinant AIMP2 protein (His tag)

Catalog Number	540241
Synonyms	Multisynthase complex auxiliary component p38; Protein JTV-1
Species	Human
Expression System	E. coli
Accession	Q13155
Molecular Weight	Predictes a molecular mass of 37.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	1-320
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-320 aa (Q13155) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human AIMP2 Protein Fragment (1-320) - A high-purity protein fragment encompassing the complete GST C-terminal domain of Aminoacyl tRNA synthase complex-interacting multifunctional protein 2. This fragment serves as an essential tool for investigating domain-specific functions in tRNA synthase complex assembly, transcriptional regulation, and apoptotic pathways. AIMP2 (Aminoacyl tRNA synthase complex-interacting multifunctional protein 2) is a multifunctional protein critical for maintaining the structural integrity of the aminoacyl-tRNA synthase complex, which is essential for protein synthesis. Beyond its structural role, AIMP2 functions as a key regulatory protein that mediates ubiquitination and degradation of FUBP1, leading to MYC down-regulation required for alveolar type II cell differentiation. It also stabilizes p53/TP53 by blocking MDM2-mediated degradation and acts as a proapoptotic factor. The protein primarily localizes to the cytoplasm and cytosol but translocates to the nucleus following DNA damage, highlighting its dynamic role in cellular stress response and signaling pathways.