Recombinant AASD1 protein (His tag)

Catalog Number	545819
Synonyms	Alanyl-tRNA synthetase domain-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q9BTE6
Molecular Weight	Predictes a molecular mass of 47.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	1-412
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-412 aa (Q9BTE6) 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 Alanyl-tRNA editing protein Aarsd1 (Alanyl-tRNA synthetase domain-containing protein 1) fragment (residues 1-412) from Homo sapiens. This fragment is designed for structural and biochemical studies, offering a stable and soluble unit that retains functional relevance for investigating tRNA editing mechanisms. The full-length Alanyl-tRNA editing protein Aarsd1 functions in trans to edit the amino acid moiety from incorrectly charged tRNA(Ala), ensuring translational fidelity by correcting mischarged tRNAs. It is localized in the cytoplasm, where it plays a critical role in maintaining protein synthesis accuracy. This recombinant fragment encompasses the complete domain (residues 1-412), enabling researchers to explore its editing activity and structural properties in detail.