Recombinant ABHDA protein (His tag)

Catalog Number	546067
Synonyms	Acyl-protein thioesterase ABHD10; Alpha/beta hydrolase domain-containing protein 10; Abhydrolase domain-containing protein 10; Mycophenolic acid acyl-glucuronide esterase, mitochondrial
Species	Human
Expression System	E. coli
Accession	Q9NUJ1
Molecular Weight	Predictes a molecular mass of 29.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	53-306
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 53-306 aa (Q9NUJ1) 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 ABHD10 Protein Fragment (aa 53-306) - A high-purity mitochondrial acyl-protein thioesterase essential for studying protein depalmitoylation mechanisms and mitochondrial antioxidant regulation. This fragment encompasses the complete AB hydrolase-1 domain, providing researchers with a functional tool for investigating S-depalmitoylation processes and metabolic enzyme activities. Palmitoyl-protein thioesterase ABHD10 is a mitochondrial enzyme that functions as an acyl-protein thioesterase, specifically hydrolyzing fatty acids from acylated residues in proteins. This enzyme plays a critical regulatory role in mitochondrial antioxidant defense by controlling the S-depalmitoylation of peroxiredoxin-5 (PRDX5), a key antioxidant protein, thereby modulating mitochondrial antioxidant capacity. Additionally, ABHD10 demonstrates metabolic significance through its ability to catalyze the deglucuronidation of mycophenolic acid acyl-glucuronide, an active metabolite of the immunosuppressant drug mycophenolate. The enzyme's exclusive mitochondrial localization underscores its importance in mitochondrial protein regulation and metabolic processes, making it a valuable target for research in cellular signaling, oxidative stress response, and drug metabolism studies.