Recombinant ACY1 protein (His tag)

Catalog Number	544832
Synonyms	ACY-1; N-acyl-L-amino-acid amidohydrolase
Species	Human
Expression System	E. coli
Accession	Q03154
Molecular Weight	Predictes a molecular mass of 47.54 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	1-408
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 1-408 aa (Q03154) 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 Aminoacylase-1 (ACY-1) Fragment (1-408) is a high-purity protein designed for structural and biochemical studies. This soluble, stable fragment retains the catalytic activity of the full-length enzyme, enabling research into N-acetylated amino acid hydrolysis. Aminoacylase-1 (ACY-1) is a cytoplasmic enzyme in humans that catalyzes the hydrolysis of N-acetylated amino acids into acetate and free amino acids, playing a critical role in amino acid metabolism and detoxification pathways. Its function is essential for maintaining cellular metabolic balance, as referenced in scientific literature (PubMed:12933810). The recombinant fragment (residues 1-408) encompasses the complete functional domain, providing an optimal tool for investigating enzyme mechanisms and substrate interactions.