Recombinant ACY3 protein (His tag)

Catalog Number	547969
Synonyms	carboxylate-forming; Acylase III; Aminoacylase-3; ACY-3; Aspartoacylase-2; Hepatitis C virus core-binding protein 1; HCBP1; HCV core-binding protein 1
Species	Human
Expression System	E. coli
Accession	Q96HD9
Molecular Weight	Predictes a molecular mass of 36.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	1-319
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 1-319 aa (Q96HD9) 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 ACY3 Protein (Aminoacylase-3), encompassing residues 1-319, is a high-purity, soluble fragment designed for structural and functional studies. This product supports research into N-acyl-aromatic-L-amino acid amidohydrolase activity and its role in metabolic pathways, offering a stable and reliable tool for biochemical and biophysical applications. ACY3, or Aminoacylase-3, is a key enzyme in human physiology that plays a critical role in deacetylating mercapturic acids within kidney proximal tubules, contributing to detoxification processes. It also acts on N-acetyl-aromatic amino acids, highlighting its involvement in amino acid metabolism. The protein is primarily localized to the apical cell membrane in the S1 segment of kidney tubules and exhibits cytoplasmic distribution in S2 and S3 segments, indicating compartment-specific functions. This recombinant fragment (1-319) captures the essential domains for studying ACY3's enzymatic mechanisms and cellular interactions, aiding investigations into its implications for renal function and metabolic disorders.