Recombinant NAAA protein (His tag)

Catalog Number	537952
Synonyms	Acid ceramidase-like protein; Acylsphingosine deacylase NAAA; N-acylsphingosine amidohydrolase-like; ASAH-like protein
Species	Human
Expression System	E. coli
Accession	Q02083
Molecular Weight	Predictes a molecular mass of 38.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	29-359
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 29-359 aa (Q02083) 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 N-acylethanolamine-hydrolyzing acid amidase (NAAA) fragment (residues 29-359) from Homo sapiens, designed for structural and biochemical studies. This soluble and stable protein unit retains key functional regions, enabling research into its role in hydrolyzing bioactive fatty acid amides. N-acylethanolamine-hydrolyzing acid amidase (NAAA) is a lysosomal enzyme that degrades bioactive fatty acid amides, with a substrate preference for N-palmitoylethanolamine and other ethanolamine derivatives. It also exhibits weak hydrolytic activity against ceramides such as N-lauroylsphingosine. Localized primarily in lysosomes and peripherally associated with membranes, NAAA plays a critical role in regulating lipid signaling pathways by converting amides to their corresponding acids. This recombinant fragment encompasses residues 29-359, which includes the alpha and beta subunit regions, providing a functional module for investigating its catalytic mechanisms and interactions.