Recombinant ENPP7 protein (His tag)

Catalog Number	542944
Synonyms	E-NPP 7; NPP-7; Alkaline sphingomyelin phosphodiesterase; Intestinal alkaline sphingomyelinase; Alk-SMase
Species	Human
Expression System	E. coli
Accession	Q6UWV6
Molecular Weight	Predictes a molecular mass of 46.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	22-416
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 22-416 aa (Q6UWV6) 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 Ectonucleotide Pyrophosphatase/Phosphodiesterase Family Member 7 (E-NPP 7) Fragment (residues 22-416) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment retains key enzymatic activity, including sphingomyelin hydrolysis and phospholipase C functions, making it an ideal tool for investigating lipid metabolism and digestive enzyme mechanisms. Ectonucleotide pyrophosphatase/phosphodiesterase family member 7 (ENPP7), also known as alkaline sphingomyelinase, is a choline-specific phosphodiesterase primarily involved in sphingomyelin digestion within the gastrointestinal tract. It hydrolyzes sphingomyelin to produce ceramide and phosphocholine, facilitating fatty acid absorption and cholesterol uptake. Additionally, ENPP7 exhibits phospholipase C activity, inactivating platelet-activating factor (PAF) and cleaving phosphocholine from palmitoyl lyso-phosphatidylcholine. The full-length protein is a single-pass type I membrane protein localized to the cell membrane, particularly on the microvillar surface of intestinal enterocytes, and its catalytic domain can be released into the extracellular space. This recombinant fragment (residues 22-416) provides a stable, soluble unit for functional and structural analyses, supporting research into lipid metabolism and related physiological processes.