Recombinant LIPF protein (His tag)

Catalog Number	539712
Synonyms	GL; Gastric lipase
Species	Human
Expression System	E. coli
Accession	P07098
Molecular Weight	Predictes a molecular mass of 44.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	20-398
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 20-398 aa (P07098) 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 Gastric Triacylglycerol Lipase (GL) Fragment (residues 20-398) is a high-purity protein designed for studying lipid metabolism. This 379-amino acid fragment fully encompasses the AB hydrolase-1 functional domain, making it an ideal tool for investigating the enzymatic activity and specific functions of gastric lipase in digestive processes. Gastric Triacylglycerol Lipase (GL), encoded by the LIPF gene in humans, catalyzes the hydrolysis of triacylglycerols to yield free fatty acids, diacylglycerol, monoacylglycerol, and glycerol. The enzyme demonstrates preferential hydrolysis at the sn-3 position of triacylglycerol, playing a crucial role in the initial stages of dietary fat digestion. As a secreted protein, gastric lipase functions in the gastrointestinal tract, where it initiates lipid breakdown before pancreatic lipases take over, making it essential for understanding lipid absorption and metabolic disorders.