





Recombinant Mouse Pancreatic triacylglycerol lipase (Pnlip)

Product Code	CSB-EP754214MO
Relevance	Plays an important role in fat metabolism. It preferentially splits the esters of long-chain fatty acids at positions 1 and 3, producing mainly 2-monoacylglycerol and free fatty acids, and shows considerably higher activity against insoluble emulsified substrates than against soluble ones (By similarity).
Abbreviation	Pnlip
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q6P8U6
Alias	PL Short name: PTL Short name: Pancreatic lipase
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	REVCFDKLGCFSDDAPWSGTLDRPLKALPWSPAQINTRFLLYTNENPDNYQLI TSDASNIRNSNFRTNRKTRIIIHGFIDKGEENWLSDMCKNMFRVESVNCICVDW KGGSRTTYTQATQNVRVVGAEVALLVNVLQSDLGYSLNNVHLIGHSLGSHIAG EAGKRTFGAIGRITGLDPAEPYFQGTPEEVRLDPTDAQFVDAIHTDAGPIIPNLG FGMSQTVGHLDFFPNGGIEMPGCQKNILSQIVDIDGIWEGTRNFAACNHLRSY KFYTDSIVNPTGFAGFSCSSYSLFTANKCFPCGSGGCPQMGHYADRYPGKTS RLYQTFYLNTGDKSNFARWRYQVTVTLSGQKVTGHILVSLFGNGGNSKQYEV FKGSLQPGTSHVNEFDSDVDVGDLQKVKFIWYNNVINPTLPKVGASRITVERN DGRVFNFCSQETVREDVLLTLSPC
Lead Time	3-7 business days
Research Area	Cardiovascular
Source	E.coli
Gene Names	Pnlip
Protein Names	Recommended name: Pancreatic triacylglycerol lipase Short name= PL Short name= PTL Short name= Pancreatic lipase EC= 3.1.1.3
Expression Region	17-465aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	65.8kDa



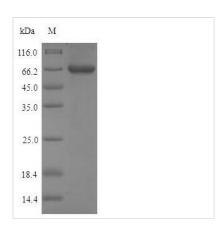




Protein Description

Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Mouse Pnlip contains amino acids 17-465. The expected molecular weight for the Pnlip protein is calculated to be 65.8 kDa. This protein is generated in a e.coli-based system. Fusion of the Nterminal 6xHis-SUMO tag into the Pnlip encoding gene fragment was conducted, allowing for easier detection and purification of the Pnlip protein in subsequent stages.

Mouse pancreatic triacylglycerol lipase (Pnlip) is a key enzyme involved in lipid digestion. Its main function includes hydrolyzing dietary triacylglycerols into fatty acids and glycerol, facilitating their absorption in the small intestine. In nutritional research, Pnlip contributes to understanding lipid metabolism and digestion. In gastrointestinal physiology, Pnlip plays a crucial role in maintaining lipid homeostasis. Investigating Pnlip provides insights into pancreatic function and its impact on overall metabolic health. Additionally, Pnlip's involvement in lipid metabolism makes it relevant in obesity and metabolic disorders research. Understanding the functions of Pnlip offers potential applications in designing therapeutic strategies targeting lipid-related diseases and metabolic disorders.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.