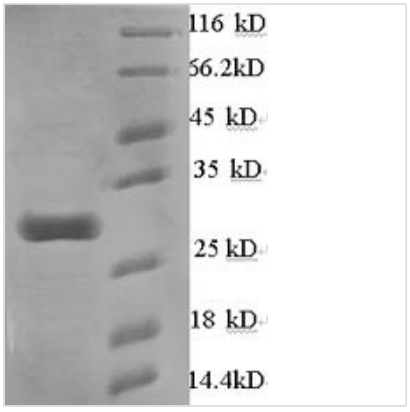
Recombinant Mouse Calcium-dependent phospholipase A2 (Pla2g5)

Product Code	CSB-EP018103MO
Relevance	PA2 catalyzes the calcium-dependent hydrolysis of the 2-acyl groups in 3-sn-phosphoglycerides. This isozyme hydrolyzes L-alpha-palmitoyl-2-oleoyl phosphatidylcholine more efficiently than L-alpha-1-palmitoyl-2-arachidonyl phosphatidylcholine, L-alpha-1-palmitoyl-2-arachidonyl phosphatidylethanolamine or L-alpha-1-stearoyl-2-arachidonyl phosphatidylinositol .
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.	P97391
Alias	Group V phospholipase A2;PLA2-10Phosphatidylcholine 2-acylhydrolase 5
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	GLLELKSMIEKVTGKNAFKNYGFYGCYCGWGGRGTPKDGTDWCCQMHDRCYGQLEEKDCAIRTQSYDYRYTNGLVICEHDSFCPMRLCACDRKLVYCLRRNLWTYNPLYQYYPNFLC
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	Pla2g5
Expression Region	21-137aa
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	29.8kDa
Protein Description	Full Length of Mature Protein
Image	



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

Description

This Mouse Calcium-dependent phospholipase A2 (Pla2g5) recombinant protein was produced in E.coli, where the gene sequence encoding Mouse Pla2g5 (21-137aa) was expressed with the N-terminal 6xHis-SUMO tag. The purity of this Pla2g5 protein was greater than 90% by SDS-PAGE.
Pla2g5 is an enzyme that primarily functions by catalyzing the hydrolysis of phospholipids, producing free fatty acids and soluble phospholipids. This process plays a crucial role in the metabolism of cell membranes, cell signal transduction, and inflammatory responses. Pla2g5 is typically expressed in various tissues and cell types, including the liver, kidneys, gastrointestinal tract, spleen, and white blood cells. Its specific biological roles in the organism include maintaining the integrity of cell membranes, regulating cell signal transduction, and participating in inflammatory responses.
Some members of the Pla2g5 enzyme family have been found to be associated with inflammatory responses and diseases. Pla2g5 may play a role in modulating the inflammatory process, as the reaction it catalyzes leads to the release of phospholipids, triggering cell membrane rupture and lipid-mediated inflammatory responses, among other effects.

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.