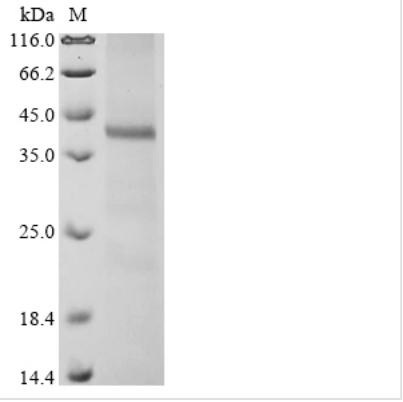
Recombinant Human 1-acyl-sn-glycerol-3-phosphate acyltransferase delta (AGPAT4)

Product Code	CSB-CF885714HU
Abbreviation	Recombinant Human AGPAT4 protein
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.	Q9NRZ5
Form	Liquid or Lyophilized powder
Storage Buffer	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MDLAGLLKSQFLCHLVFCYVFIASGLIINTIQLFTLLLWPINKQLFRKINCRLSYCI SSQLVMLLEWWSGTECTIFTDPRAYLKYGKENAIVVLNHKFEIDFLCGWSLSE RFGLLGGSKVLAKKELAYVPIIGWMWYFTEMVFCSRKWEQDRKTVATSLQHL RDYPEKYFFLIHCEGTRFTEKKHEISMQVARAKGLPRLKHHLLPRTKGFAITVR SLRNVVSAVYDCTLNFRNNENPTLLGVLNGKKYHADLYVRRIPLEDIPEDDDEC SAWLHKLYQEKDAFQEEYYRTGTFPETPMVPPRRPWTLVNWLFWASLVLYPF FQFLVSMIRSGSSLTLASFILVFFVASVGVRWMIGVTEIDKGSAYGNSDSKQKL ND-
Research Area	Cancer
Source	in vitro E.coli expression system
Target Names	AGPAT4
Expression Region	1-319aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	45.5 kDa
Protein Length	Full Length
Image	



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

Description

To produce a recombinant human 1-acyl-sn-glycerol-3-phosphate acyltransferase delta (AGPAT4) protein tagged with an N-terminal 10xHis-tag in an in vitro E. coli expression system, the full-length human AGPAT4 gene fragment (1-319aa) along with an N-terminal 10xHis-tag is cloned into a suitable expression vector with the necessary regulatory elements. The recombinant plasmid DNA containing the AGPAT4 gene fragment is isolated and purified. In vitro transcription is performed using the purified plasmid DNA to synthesize mRNA, which serves as a template in the subsequent in vitro translation reaction. The translation reaction is set up using an E. coli cell-free extract supplemented with energy sources and amino acids. Following incubation, the recombinant AGPAT4 protein is purified from the cell culture medium. The purity of the recombinant AGPAT4 protein, measuring up to 85%, is assessed by SDS-PAGE analysis, where it appears as a band with a molecular weight of approximately 40 kDa.

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.

Shelf Life

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.