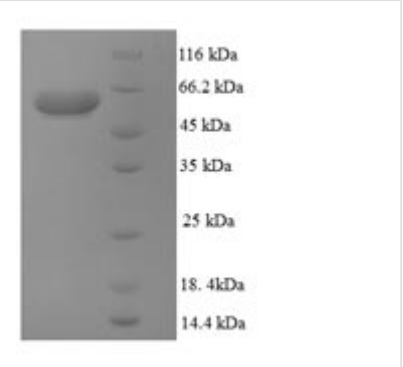
Recombinant Mouse Multidrug resistance protein 3 (Abcb4), partial

Product Code	CSB-EP001050MO
Relevance	Energy-dependent phospholipid efflux translocator that acts as a positive regulator of biliary lipid secretion. Functions as a floppase that translocates specifically phosphatidylcholine (PC) from the inner to the outer leaflet of the canalicular membrane bilayer into the canaliculi between hepatocytes. Translocation of PC makes the biliary phospholipids available for extraction into the canaliculi lumen by bile salt mixed micelles and therefore protects the biliary tree from the detergent activity of bile salts (PubMed:8106172, PubMed:7912658, PubMed:7592705, PubMed:7814632, PubMed:8725158, PubMed:9366571). Plays a role in the recruitment of phosphatidylcholine (PC), phosphatidylethanolamine (PE) and sphingomyelin (SM) molecules to nonraft membranes and to further enrichment of SM and cholesterol in raft membranes in hepatocytes (By similarity). Required for proper phospholipid bile formation (PubMed:8106172). Indirectly involved in cholesterol efflux activity from hepatocytes into the canalicular lumen in the presence of bile salts in an ATP-dependent manner (PubMed:7814632, PubMed:8725158). May promote biliary phospholipid secretion as canaliculi-containing vesicles from the canalicular plasma membrane (PubMed:9366571). In cooperation with ATP8B1, functions to protect hepatocytes from the deleterious detergent activity of bile salts (PubMed:21820390). Does not confer multidrug resistance (PubMed:1990275).
Abbreviation	Recombinant Mouse Abcb4 protein, partial
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.	P21440
Alias	ATP-binding cassette sub-family B member 4Imported Multidrug resistance protein 21 Publication Multidrug resistance protein 3By similarity (EC:3.6.3.44) P-glycoprotein 2By similarity P-glycoprotein 3
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	DAFANARGAAYVIFDIIDNNPKIDSFSERGHKPDNIKGNLEFSDVHFSYPSRANI KILKGLNLKVKSGQTVALVGNSGCGKSTTVQLLQRLYDPTEGKISIDGQDIRNF NVRCLREIIGVVSQEPVLFSTTIAENIRYGRGNVTMDEIEKAVKEANAYDFIMKL PQKFDTLVGDRGAQLSGGQKQRIAIARALVRNPKILLLDEATSALDTESEAEVQ AALDKAREGRTTIVIAHRLSTIRNADVIAGFEDGVIVEQGSHSELMKKEGIYFRL VNMQTAGSQILSEEFEVELSDEKAAGDVAPNGWKARIFRNSTKKSLKSPHQN RLDEETNELDANVPPVSFLKVLKLNKTEWPYF

Research Area	Others
Source	E.coli
Target Names	Abcb4
Expression Region	352-708aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	66.6kDa
Protein Length	Cytoplasmic Domain

Image



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

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.