10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PLSCR3 Rabbit mAb

Catalog # AP75928

Product Information

Application	WB
Primary Accession	Q9NRY6
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	31648

Additional Information

Gene ID	57048
Other Names	PLSCR3
Dilution	WB~~1:1000-1:5000
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

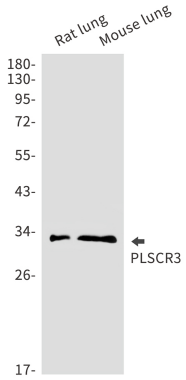
Name	PLSCR3
Function	Catalyzes calcium-induced ATP-independent rapid bidirectional and non-specific movement of the phospholipids (lipid scrambling or lipid flip-flop) between the inner and outer membrane of the mitochondria (PubMed:14573790, PubMed:17226776, PubMed:18358005, PubMed:29337693, PubMed:31769662). Plays an important role in mitochondrial respiratory function, morphology, and apoptotic response (PubMed:12649167, PubMed:14573790, PubMed:17226776, PubMed:18358005). Mediates the translocation of cardiolipin from the mitochondrial inner membrane to outer membrane enhancing t-Bid induced cytochrome c release and apoptosis (PubMed:14573790, PubMed:17226776, PubMed:18358005). Enhances TNFSF10-induced apoptosis by regulating the distribution of cardiolipin in the mitochondrial membrane resulting in increased release of apoptogenic factors and consequent amplification of the activity of caspases (PubMed:18491232). Regulates cardiolipin de novo biosynthesis and its resynthesis (PubMed:16939411).

Cellular Location	Mitochondrion membrane; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q6QBQ4}. Mitochondrion inner membrane {ECO:0000250|UniProtKB:Q6QBQ4}; Single-pass type II membrane protein {ECO:0000250|UniProtKB:Q6QBQ4}. Nucleus {ECO:0000250|UniProtKB:Q9JIZ9} Note=Palmitoylation regulates its localization to the cell membrane or the nucleus; trafficking to the cell membrane is dependent upon palmitoylation whereas in the absence of palmitoylation, localizes to the nucleus. {ECO:0000250|UniProtKB:Q9JIZ9}
Tissue Location	Expressed in heart, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, prostate, uterus, small intestine and peripheral blood lymphocytes. Not detected in testis, brain and liver

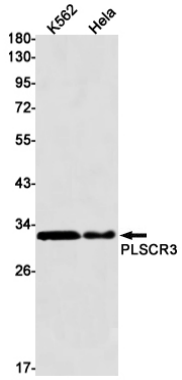
Background

May mediate accelerated ATP-independent bidirectional transbilayer migration of phospholipids upon binding calcium ions that results in a loss of phospholipid asymmetry in the plasma membrane. May play a central role in the initiation of fibrin clot formation, in the activation of mast cells and in the recognition of apoptotic and injured cells by the reticuloendothelial system. Seems to play a role in apoptosis, through translocation of cardiolipin from the inner to the outer mitochondrial membrane which promotes BID recruitment and enhances tBid-induced mitochondrial damages.

Images



Western blot analysis of PLSCR3 in rat lung, mouse lung lysates using PLSCR3 antibody.



Western blot analysis of PLSCR3 in K562, Hela lysates using PLSCR3 antibody.

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