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PLA2G4E Rabbit pAb

Catalog # AP96209

Product Information

Application	WB
Primary Accession	Q3MJ16
Other Accession	Q3MJ16
Reactivity	Rat, Mouse
Predicted	Human, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	99190
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PLA2G4E
Epitope Specificity	451-550/856
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytosol. Lysosome membrane, Peripheral membrane protein.
SIMILARITY	Contains 1 C2 domain.Contains 1 PLA2c domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PLA2G4E is a calcium-dependent phospholipase A2 that selectively hydrolyzes glycerophospholipids in the sn-2 position.

Additional Information

Gene ID	123745
Other Names	2310026J01Rik; C230096D22; Pla2epsilon; RGD1310595; PA24E_HUMAN; PLA2G4E; cPLA2-epsilon; Calcium-dependent N-acyltransferase; Phospholipase A2 group IVE; 3.1.1.4; PA24E_MOUSE; phospholipase A2, group IVE
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PLA2G4E (HGNC:24791)
Function	Calcium-dependent N-acyltransferase involved in the biosynthesis of N-acyl

	ethanolamines (NAEs) in the brain (PubMed:29447909). Transfers the sn-1 fatty acyl chain of phosphatidylcholine (fatty acyl donor) to the amine group of phosphatidylethanolamine (fatty acyl acceptor) to generate N-acyl phosphatidylethanolamine (NAPE). Similarly can use plasmenylethanolamine as a fatty acyl acceptor to form N-acyl plasmenylethanolamine (N-Acyl-PlsEt). Both NAPE and N-Acyl-PlsEt can serve as precursors of bioactive NAEs like N-arachidonoyl phosphatidylethanolamine also called anandamide (PubMed:29447909, PubMed:30517655). Has weak phospholipase A2 and lysophospholipase activities (By similarity). Regulates intracellular membrane trafficking that requires modulation of membrane curvature as it occurs by enrichment in lysophospholipids. Promotes tubule formation involved in clathrin-independent endocytotic trafficking and cargo recycling (By similarity).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q50L42}. Early endosome membrane {ECO:0000250|UniProtKB:Q50L42}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q50L42}; Cytoplasmic side {ECO:0000250|UniProtKB:Q50L42}. Lysosome membrane {ECO:0000250|UniProtKB:Q50L42}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q50L42}; Cytoplasmic side {ECO:0000250|UniProtKB:Q50L42}. Cell membrane {ECO:0000250|UniProtKB:Q50L42}; Peripheral membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:Q50L42}. Note=Targeted to clathrin-independent endocytotic vesicles through binding to phosphoinositides, especially phosphatidylinositol 4,5-bisphosphates {ECO:0000250|UniProtKB:Q50L42}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.