

PLA2G4E Antibody
affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50044**Specification**

PLA2G4E Antibody - Product Information

Application	WB, IHC
Primary Accession	Q3MJ16
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98,57 KDa
Antigen Region	428-456

PLA2G4E Antibody - Additional Information**Gene ID** 123745**Other Names**

Cytosolic phospholipase A2 epsilon, cPLA2-epsilon, Phospholipase A2 group IVE, PLA2G4E

Dilution

WB~~ 1:500-1:1000

IHC~~1:50-1:100

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

PLA2G4E Antibody - 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

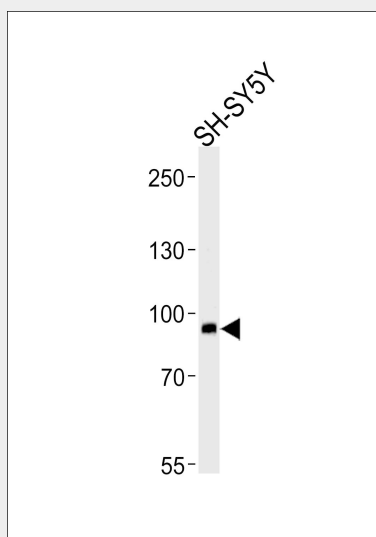
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q50L42}. Early endosome membrane {ECO:0000250|UniProtKB:Q50L42}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q50L42}; Cytoplasmic side {ECO:0000250|UniProtKB:Q50L42}. Lysosome membrane {ECO:0000250|UniProtKB:Q50L42}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q50L42}; 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}

PLA2G4E Antibody - Protocols

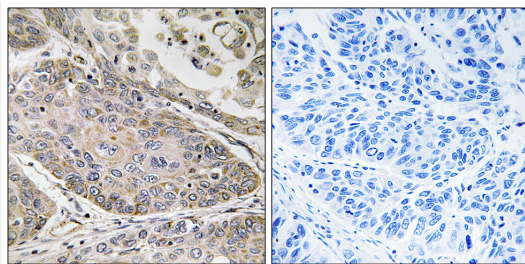
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PLA2G4E Antibody - Images



Western blot analysis of lysates from SH-SY5Y cell line (from left to right), using PLA2G4E Antibody (C15307). C15307 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue using PLA2G4E antibody.

PLA2G4E Antibody - Background

Calcium-dependent phospholipase A2 that selectively hydrolyzes glycerophospholipids in the sn-2 position (By similarity).

PLA2G4E Antibody - References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:671-675(2006).