



cPLA2 Rabbit mAb

Catalog No	YP-rAb-17041
Isotype	IgG
Reactivity	Human,Mouse
Applications	WB,IF,IP,ELISA
Gene Name	PLA2G4A
Protein Name	Cytosolic phospholipase A2
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	cPLA2;Cytosolic phospholipase A2;PLA2G4A ; CPLA2 ; PLA2G4 ; Cytosolic phospholipase A2 ; Phospholipase A2 group IVA;PLA2G4A
Observed Band	95kD
Calculated Molecular Weight	85kD
Cell Pathway	Cytoplasm . Golgi apparatus membrane . Nucleus envelope. Translocates to intracellular membranes in a calcium-dependent way. .
Tissue Specificity	Expressed in various cells and tissues such as macrophages, neutrophils, fibroblasts and lung endothelium. Expressed in platelets (at protein level) (PubMed:25102815).
Function	Catalytic activity:2-lysophosphatidylcholine + H(2)O = glycerophosphocholine + a carboxylate..Catalytic activity:Phosphatidylcholine + H(2)O = 1-acylglycerophosphocholine + a carboxylate..Domain:The N-terminal C2 domain, by its association with lipid membranes, mediates the regulation of CPLA2 by presenting the active site to its substrate in response to elevations of cytosolic Ca(2+)..enzyme regulation:Stimulated by agonists such as ATP, EGF, thrombin and bradykinin as well as by cytosolic Ca(2+)..Function:Selectively hydrolyzes arachidonyl phospholipids in the sn-2 position releasing arachidonic acid. Together with its lysophospholipid activity, it is implicated in the initiation of the inflammatory response..PTM:Activated by phosphorylation at both Ser-505 and Ser-727..similarity:Contains 1 C2 domain..similarity:Contains 1 PLA2c





domain.,subcellular location:Translocates to membrane vesicles in a calcium-dependent fashion.,subunit:Interacts with HTATIP.,tissue specificity:Expressed in various tissues such as macrophages, platelets, neutrophils, fibroblasts and lung endothelium.,

Background

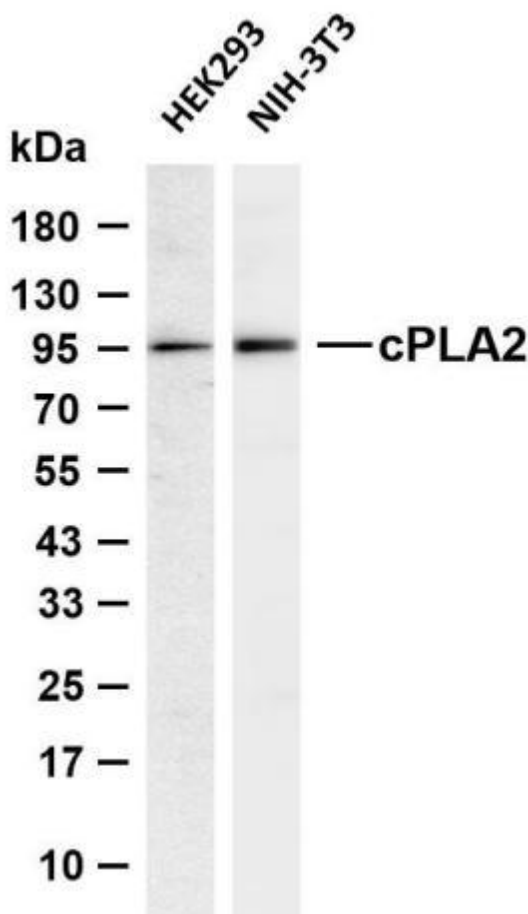
This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory responses, and other intracellular pathways. The hydrolysis reaction also produces lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular Ca^{2+} levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-cPLA2 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HEK293 Lane 2: NIH-3T3
Predicted band size: 85kDa Observed band size: 95kDa

