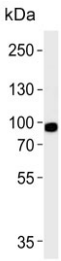
Phospholipase A2 Antibody / PLA2G4A / cPLA2 (F54970)

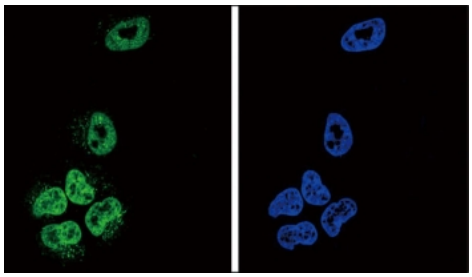
Catalog No.	Formulation	Size
F54970-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54970-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

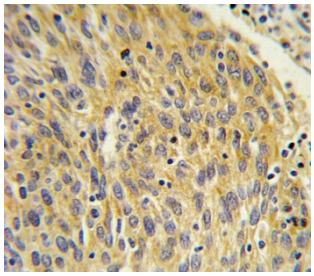
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P47712
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 1:500-1:1000 Flow Cytometry : 1:10-1:50 (1x10e6 cells) Immunofluorescence : 1:10-1:50 Immunohistochemistry (FFPE) : 1:10-1:50
Limitations	This Phospholipase A2 antibody is available for research use only.



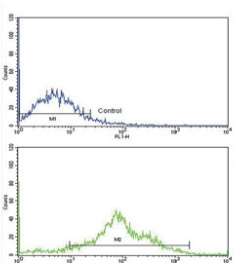
Western blot testing of human HEK293 cell lysate with Phospholipase A2 antibody. Predicted molecular weight ~85 kDa.



Immunofluorescent staining of human NCI-H460 cells with Phospholipase A2 antibody (green) and DAPI nuclear stain (blue).



IHC testing of FFPE human lung carcinoma tissue with Phospholipase A2 antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Flow cytometry testing of human NCI-H292 cells with Phospholipase A2 antibody; Blue=isotype control, Green= Phospholipase A2 antibody.

Description

PLA2G4A is 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.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Phospholipase A2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 513-541 from the human protein was used as the immunogen for the Phospholipase A2 antibody.

Storage

Aliquot the Phospholipase A2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.