

ARG82834 Human PLA2G4A ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82834-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82834-002	Standard	2 X 10 ng/vial	4°C
ARG82834-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82834-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82834-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82834-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82834-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82834-008	25X Wash buffer	20 ml	4°C
ARG82834-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82834-010	STOP solution	10 ml (Ready to use)	4°C
ARG82834-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82834 Human PLA2G4A ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human PLA2G4A in serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	PLA2G4A
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	31.3 pg/ml
Sample Type	Serum, plasma (EDTA, heparin, citrate) and cell culture supernatants.
Standard Range	62.5 - 4000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.8% Inter-Assay CV: 6.6%

Alternate Names Phospholipase A2 group IVA; cPLA2; cPLA2-alpha; Phosphatidylcholine 2-acylhydrolase; PLA2G4; Cytosolic phospholipase A2; EC 3.1.1.5; EC 3.1.1.4

Application Instructions

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol PLA2G4A

Gene Full Name phospholipase A2, group IVA (cytosolic, calcium-dependent)

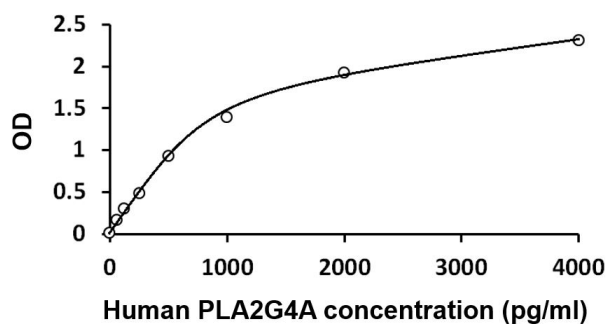
Background This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based 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]

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. [UniProt]

PTM Activated by phosphorylation at both Ser-505 and Ser-727. [UniProt]

Cellular Localization Cytoplasm. Cytoplasmic vesicle. Note=Translocates to membrane vesicles in a calcium-dependent fashion. [UniProt]

Images



ARG82834 Human PLA2G4A ELISA Kit standard curve image

ARG82834 Human PLA2G4A ELISA Kit results of a typical standard run with optical density reading at 450 nm.