

Product datasheet

Anti-PLA2R antibody [EPR20483] ab211573

Recombinant RabMAb

[2 References](#) [4 Images](#)

Overview

Product name	Anti-PLA2R antibody [EPR20483]
Description	Rabbit monoclonal [EPR20483] to PLA2R
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal kidney lysate. IHC-P: Human kidney tissue (from a patient with renal clear cell carcinoma).
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20483
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab211573 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 180 kDa (predicted molecular weight: 169 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

Receptor for secretory phospholipase A2 (sPLA2). Acts as a receptor for phospholipase sPLA2-IB/PLA2G1B but not sPLA2-IIA/PLA2G2A. Also able to bind to snake PA2-like toxins. Although its precise function remains unclear, binding of sPLA2 to its receptor participates in both positive and negative regulation of sPLA2 functions as well as clearance of sPLA2. Binding of sPLA2-IB/PLA2G1B induces various effects depending on the cell type, such as activation of the mitogen-activated protein kinase (MAPK) cascade to induce cell proliferation, the production of lipid mediators, selective release of arachidonic acid in bone marrow-derived mast cells. In neutrophils, binding of sPLA2-IB/PLA2G1B can activate p38 MAPK to stimulate elastase release and cell adhesion. May be involved in responses in proinflammatory cytokine productions during endotoxic shock. Also has endocytic properties and rapidly internalizes sPLA2 ligands, which is particularly important for the clearance of extracellular sPLA2s to protect their potent enzymatic activities. The soluble secretory phospholipase A2 receptor form is circulating and acts as a negative regulator of sPLA2 functions by blocking the biological functions of sPLA2-IB/PLA2G1B.

Tissue specificity

Present in lung macrophage (at protein level). Highly expressed in kidney. Also expressed in pancreas, amnion, choriodecidua and placenta. Isoform 2 is expressed at much lower level.

Sequence similarities

Contains 8 C-type lectin domains.
Contains 1 fibronectin type-II domain.
Contains 1 ricin B-type lectin domain.

Domain

C-type lectin domains 3-5 mediate the interaction with phospholipase PLA2G1B.
The endocytosis signal probably mediates endocytosis via clathrin-coated pits.

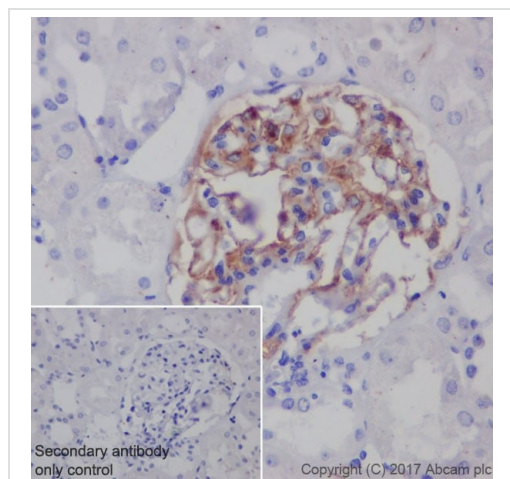
Post-translational modifications

The secretory phospholipase A2 receptor form may be produced by the action of metalloproteinases. It contains all extracellular domains and only lacks transmembrane and cytosolic regions. It is however unclear whether this form is produced by proteolytic cleavage as suggested by some experiments, or by alternative splicing, as in the case of isoform 2 that shares all characteristics of secretory phospholipase A2 receptor form.

Cellular localization

Secreted and Cell membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PLA2R antibody [EPR20483] (ab211573)

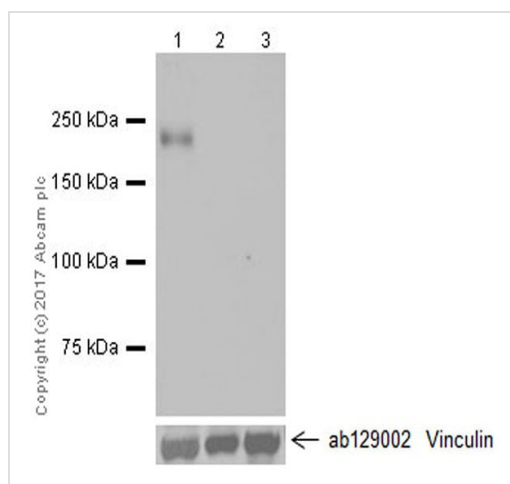
Immunohistochemical analysis of paraffin-embedded human kidney tissue (from a patient with renal clear cell carcinoma) labeling PLA2R with ab211573 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Positive staining on glomerular basement membrane of human kidney (PMID: 26222864).

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-PLA2R antibody [EPR20483] (ab211573)

All lanes : Anti-PLA2R antibody [EPR20483] (ab211573) at 1/1000 dilution

Lane 1 : Human fetal kidney lysate

Lane 2 : Human fetal liver lysate

Lane 3 : Human fetal heart lysate

Lysates/proteins at 50 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

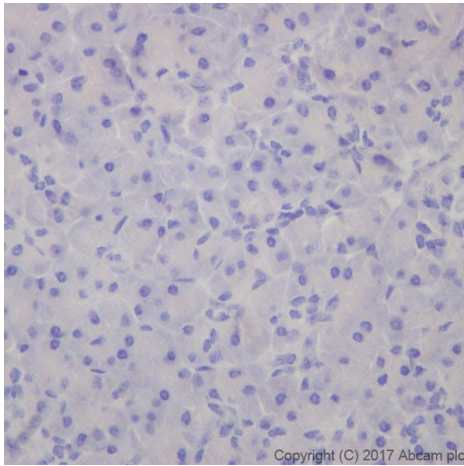
Predicted band size: 169 kDa

Observed band size: 180 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

PLA2R is specifically expressed in kidney (PMID: 7721806).



Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling PLA2R with ab211573 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Negative control: No staining on human pancreas (PMID: 7721806).

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PLA2R antibody [EPR20483] (ab211573)

Why choose a recombinant antibody?



Anti-PLA2R antibody [EPR20483] (ab211573)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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