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cPLA₂ (m): 293T Lysate: sc-119430

BACKGROUND

Phospholipase A₂s (PLA₂s) constitute a family of esterases that hydrolyze the sn-2-acyl ester bond in glycerophospholipid molecules. These enzymes are generally calcium-dependent and have been found both intra- and extracellularly. By hydrolyzing the sn-2 bond in glycerophospholipids, PLA₂s release fatty acids. One such fatty acid, arachidonic acid, generates the substrates for the initiation of the arachidonic acid cascade that produces various eicosanoids (i.e. prostaglandins, leukotrienes and thromboxanes), many of which are potent mediators of inflammation. PLA₂s include both the relatively low molecular weight type I and type II enzymes and the form known as cytoplasmic PLA₂ (cPLA₂). cPLA₂ is present in the cytosol of various cells and tissues, including platelets, macrophages and monoblasts; preferentially hydrolyzing the sn-2 position of phospholipid molecules, releasing free arachidonate.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLA2G4A (human) mapping to 1q31.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

cPLA₂ (m): 293T Lysate represents a lysate of mouse cPLA₂ transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

cPLA₂ (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive cPLA₂ antibodies. Recommended use: 10-20 µl per lane.

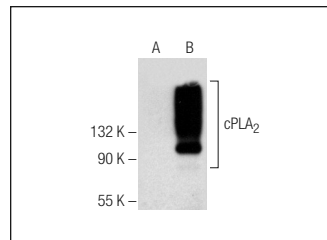
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

cPLA₂ (H-12): sc-376636 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse cPLA₂ expression in cPLA₂ transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



cPLA₂ (H-12): sc-376636. Western blot analysis of cPLA₂ expression in non-transfected: sc-117752 (A) and mouse cPLA₂ transfected: sc-119430 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.