

group V PLA₂ (1B7): sc-20023

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 group I, group II and group V enzymes and the form known as cytoplasmic PLA₂ (cPLA₂). cPLA₂ is present in macrophages, and hydrolyzes the sn-2 fatty acyl ester bond of phospholipids to produce a free fatty acid and a lysophospholipid.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLA2G5 (human) mapping to 1p36.13; Pla2g5 (mouse) mapping to 4 D3.

SOURCE

group V PLA₂ (1B7) is a mouse monoclonal antibody raised against W79A mutant of VPLA₂ of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

group V PLA₂ (1B7) is recommended for detection of group V PLA₂ of mouse, rat and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for group V PLA₂ siRNA (h): sc-44023, group V PLA₂ siRNA (m): sc-62825, group V PLA₂ siRNA (r): sc-270119, group V PLA₂ shRNA Plasmid (h): sc-44023-SH, group V PLA₂ shRNA Plasmid (m): sc-62825-SH, group V PLA₂ shRNA Plasmid (r): sc-270119-SH, group V PLA₂ shRNA (h) Lentiviral Particles: sc-44023-V, group V PLA₂ shRNA (m) Lentiviral Particles: sc-62825-V and group V PLA₂ shRNA (r) Lentiviral Particles: sc-270119-V.

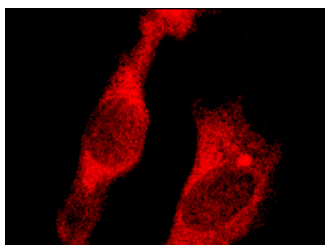
Molecular Weight of group V PLA₂: 14 kDa.

Positive Controls: A-10 cell lysate: sc-3806.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



group V PLA₂ (1B7): sc-20023. Immunofluorescence staining of methanol-fixed A-10 cells showing cytoplasmic staining.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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