

group VI iPLA₂ (A-10): sc-137189

BACKGROUND

Phospholipases catalyze the release of fatty acids from phospho-lipids. One member of the phospholipase family, iPLA₂, is detected as a membrane-bound protein with multiple smaller isoforms, which result from alternative splicing. Two isoforms, Ankyrin-iPLA₂-1 and 2, lack the catalytic domain and are thought to be involved in the negative regulation of iPLA₂ activity. The SH-iPLA₂ isoform is cytoplasmic-ally localized. The human gene encoding iPLA₂ maps to chromosome 22q13.1. Another phospholipase, sPLA₂, belongs to a family of secretory phospholipases A₂, which represent an expanding family of related enzymes. sPLA₂ has both membrane bound and secreted forms that are encoded by a single gene. sPLA₂ is involved in the regulation of phospholipid metabolism in biomembranes and in eicosanoid biosynthesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLA2G6 (human) mapping to 22q13.1; Pla2g6 (mouse) mapping to 15 E1.

SOURCE

group VI iPLA₂ (A-10) is a mouse monoclonal antibody raised against amino acids 1-120 of group VI iPLA₂ of human origin.

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 VI iPLA₂ (A-10) is recommended for detection of calcium-independent PLA₂ of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for group VI iPLA₂ siRNA (h): sc-43819, group VI iPLA₂ siRNA (m): sc-43820, group VI iPLA₂ siRNA (r): sc-270117, group VI iPLA₂ shRNA Plasmid (h): sc-43819-SH, group VI iPLA₂ shRNA Plasmid (m): sc-43820-SH, group VI iPLA₂ shRNA Plasmid (r): sc-270117-SH, group VI iPLA₂ shRNA (h) Lentiviral Particles: sc-43819-V, group VI iPLA₂ shRNA (m) Lentiviral Particles: sc-43820-V and group VI iPLA₂ shRNA (r) Lentiviral Particles: sc-270117-V.

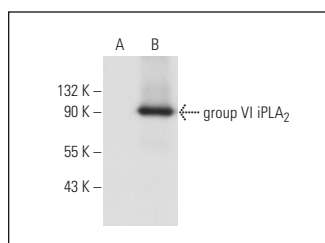
Molecular Weight of group VI iPLA₂: 88 kDa.

Positive Controls: group VI iPLA₂ (h): 293T Lysate: sc-116309 or rat testis extract: sc-2400.

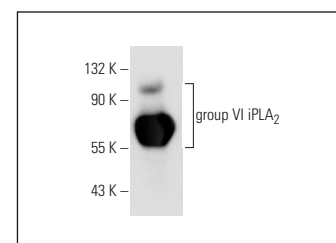
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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 VI iPLA₂ (A-10): sc-137189. Western blot analysis of group VI iPLA₂ expression in non-transfected: sc-117752 (A) and human group VI iPLA₂ transfected: sc-116309 (B) 293T whole cell lysates.



group VI iPLA₂ (A-10): sc-137189. Western blot analysis of group VI iPLA₂ expression in rat testis tissue extract.

STORAGE

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

RESEARCH USE

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