

group IVC sPLA₂ (N-14): sc-161687

BACKGROUND

group IVC sPLA₂, also known as PLA2G4C (phospholipase A₂, group IVC (cytosolic, calcium-independent)) or cPLA₂-γ, is a 541 amino acid protein that is lipid-anchored to the membrane and contains one PLA₂c domain. Expressed at high levels in heart and skeletal muscle, group IVC sPLA₂ functions to catalyze the conversion of phosphatidylcholine to 1-acylglycerophosphocholine and a carboxylate, a reaction which is important in the creation of signaling molecules. The gene encoding group IVC sPLA₂ maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (Fc Rs).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLA2G4C (human) mapping to 19q13.32.

SOURCE

group IVC sPLA₂ (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of group IVC sPLA₂ of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161687 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

group IVC sPLA₂ (N-14) is recommended for detection of group IVC sPLA₂ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 IVC sPLA₂ siRNA (h): sc-97603, group IVC sPLA₂ shRNA Plasmid (h): sc-97603-SH and group IVC sPLA₂ shRNA (h) Lentiviral Particles: sc-97603-V.

Molecular Weight of group IVC sPLA₂: 61 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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