

group IVF sPLA₂ (M-20): sc-160402

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, many of which are potent mediators of inflammation. Group IVD sPLA₂, also known as PLA₂G4D (phospholipase A₂ group IVD) or cPLA₂- δ (cytosolic phospholipase A₂ δ), is a 818 amino acid calcium-dependent phospholipase that contains one PLA₂c domain, a C2 domain and exists as two alternatively spliced isoforms. A peripheral membrane protein, group IVD sPLA₂ is suggested to play a role in the inflammation of psoriatic lesions, and catalyzes the reaction of phosphatidylcholine and water into 1-acylglycerophosphocholine and carboxylate.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Pla2g4f (mouse) mapping to 2 E5.

SOURCE

group IVF sPLA₂ (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of group IVF sPLA₂ of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-160402 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

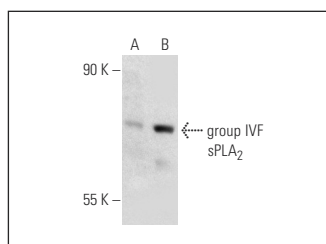
group IVF sPLA₂ (M-20) is recommended for detection of group IVF sPLA₂ of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other Phospholipase A₂ family members.

Suitable for use as control antibody for group IVF sPLA₂ siRNA (m): sc-145778, group IVF sPLA₂ shRNA Plasmid (m): sc-145778-SH and group IVF sPLA₂ shRNA (m) Lentiviral Particles: sc-145778-V.

Molecular Weight of group IVF sPLA₂: 95 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or WI-38 whole cell lysate: sc-364260.

DATA



group IVF sPLA₂ (M-20): sc-160402. Western blot analysis of group IVF sPLA₂ expression in WI 38 (A) and KNRK (B) whole cell lysates.

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.

PROTOCOLS

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