



# group XIIA sPLA<sub>2</sub> (K-15): sc-104300

## BACKGROUND

Secreted phospholipases A<sub>2</sub> (sPLA<sub>2</sub>s) form a large family of structurally related enzymes, which are widespread in nature. Snake venoms have been known for decades to contain a tremendous molecular diversity of sPLA<sub>2</sub>s, which can exert a myriad of toxic and pharmacological effects. Secreted phospholipase A<sub>2</sub> enzymes liberate arachidonic acid from phospholipids for production of eicosanoids and exert a variety of physiologic and pathologic effects. Group XII sPLA<sub>2</sub>s, such as group XIIA sPLA<sub>2</sub>, have relatively low specific activity and are structurally and functionally distinct from other sPLA<sub>2</sub>s. Group XIIA sPLA<sub>2</sub>, also known as GXII, ROSSY, PLA2G12 or PLA2G12A, is a 189 amino acid secreted protein that localizes to the cytoplasm. Belonging to the phospholipase A<sub>2</sub> family, group XIIA sPLA<sub>2</sub> is abundantly expressed in heart, skeletal muscle, kidney, liver and pancreas.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PLA2G12A (human) mapping to 4q25.

## SOURCE

group XIIA sPLA<sub>2</sub> (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of group XIIA sPLA<sub>2</sub> of human origin.

## 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-104300 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

group XIIA sPLA<sub>2</sub> (K-15) is recommended for detection of group XIIA sPLA<sub>2</sub> 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 XIIA sPLA<sub>2</sub> siRNA (h): sc-89136, group XIIA sPLA<sub>2</sub> shRNA Plasmid (h): sc-89136-SH and group XIIA sPLA<sub>2</sub> shRNA (h) Lentiviral Particles: sc-89136-V.

Molecular Weight of group XIIA sPLA<sub>2</sub>: 21 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.