

# NAPE-PLD (G-13): sc-163117

## BACKGROUND

NAPE-PLD (N-acyl-phosphatidylethanolamine-hydrolyzing phospholipase D), also known as FMP30, is a 393 amino acid membrane protein and phospholipase D type enzyme that hydrolyzes N-acyl-phosphatidylethanolamines (NAPEs) to produce N-acylethanolamines (NAEs) and phosphatidic acid. Existing as a monomer, NAPE-PLD binds one or two zinc ions per subunit and is stimulated by divalent cations. NAPE-PLD also plays an essential role in the production of anandamide, a protein which acts as a ligand for vanilloid and cannabinoid receptors. The gene encoding NAPE-PLD maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NAPEPLD (human) mapping to 7q22.1; Napepld (mouse) mapping to 5 A3.

## SOURCE

NAPE-PLD (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NAPE-PLD of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-163117 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NAPE-PLD (G-13) is recommended for detection of NAPE-PLD of mouse, rat and 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).

NAPE-PLD (G-13) is also recommended for detection of NAPE-PLD in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for NAPE-PLD siRNA (h): sc-89408, NAPE-PLD siRNA (m): sc-149828, NAPE-PLD shRNA Plasmid (h): sc-89408-SH, NAPE-PLD shRNA Plasmid (m): sc-149828-SH, NAPE-PLD shRNA (h) Lentiviral Particles: sc-89408-V and NAPE-PLD shRNA (m) Lentiviral Particles: sc-149828-V.

Molecular Weight of NAPE-PLD: 46 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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.



Try **NAPE-PLD (E-8): sc-514372**, our highly recommended monoclonal alternative to NAPE-PLD (G-13).