# PPAPDC2 (N-14): sc-163253



The Power to Question

#### **BACKGROUND**

PPAPDC2 (phosphatidic acid phosphatase type 2 domain containing 2), also known as PSDP (presqualene diphosphate phosphatase) or PDP1, is a 295 amino acid multi-pass membrane protein belonging to the PA-phosphatase related phosphoesterase family. As a phosphatase and bioactive lipid, PPA-PDC2 may indirectly participate in innate immunity as it dephosphorylates PSDP (presqualene diphosphate) to form PSMP (presqualene monophosphate). While widely expressed, PPAPDC2 is found at highest levels in brain, kidney, thymus, placenta, spleen and gastrointestinal organs, and has peak activity at a pH of 7-8. PPAPDC2 is subject to post-translational phosphorylation and is encoded by a gene that maps to human chromosome 9, which which houses over 900 genes, comprises nearly 4% of the human genome and is associated with hereditary hemorrhagic telangiectasia and Familial dysautonomia.

## **REFERENCES**

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#### **CHROMOSOMAL LOCATION**

Genetic locus: PPAPDC2 (human) mapping to 9p24.1; Ppapdc2 (mouse) mapping to 19 C1.

### **STORAGE**

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

## **SOURCE**

PPAPDC2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PPAPDC2 of human origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-163253 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

PPAPDC2 (N-14) is recommended for detection of PPAPDC2 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); non cross-reactive with PPAPDC3.

Suitable for use as control antibody for PPAPDC2 siRNA (h): sc-92762, PPA-PDC2 siRNA (m): sc-152403, PPAPDC2 shRNA Plasmid (h): sc-92762-SH, PPAPDC2 shRNA Plasmid (m): sc-152403-SH, PPAPDC2 shRNA (h) Lentiviral Particles: sc-92762-V and PPAPDC2 shRNA (m) Lentiviral Particles: sc-152403-V.

Molecular Weight of PPAPDC2: 32 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.

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