



PLC η 2 (A-17): sc-104619

BACKGROUND

Phosphoinositide-specific phospholipase C (PLC) plays a crucial role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG) from phosphatidylinositol 4,5-bisphosphate. There are many mammalian PLC isozymes, including PLC β 1, PLC β 2, PLC β 3, PLC β 4, PLC γ 1, PLC γ 2, PLC δ 1, PLC δ 2, PLC ϵ and PLC η 2. PLC η 2 (phospholipase C, η 2), also known as PLCH2 or PLCL4, is a 1,416 amino acid cell membrane protein that contains one C2 domain, one PH domain, one PI-PLC X-box and Y-box domain and two EF-hand domains. Expressed in kidney and retinal tissue, PLC η 2 uses calcium as a cofactor to produce DAG and IP3, thereby playing an important role in the formation and maintenance of neuronal networks. Multiple isoforms of PLC η 2 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLCH2 (human) mapping to 1p36.32.

SOURCE

PLC η 2 (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PLC η 2 of human 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-104619 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PLC η 2 (A-17) is recommended for detection of PLC η 2 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); non cross-reactive with other PLC family members.

Suitable for use as control antibody for PLC η 2 siRNA (h): sc-88680, PLC η 2 shRNA Plasmid (h): sc-88680-SH and PLC η 2 shRNA (h) Lentiviral Particles: sc-88680-V.

Molecular Weight of PLC η 2: 155 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.