

PI 3-kinase C2 γ (K-16): sc-48634

BACKGROUND

Phosphoinositide 3-kinase activity is implicated in assorted cellular responses activated by mammalian cell surface receptors and the regulation of protein sorting in yeast. The p110 γ (PIK3CG) enzyme is activated *in vitro* by both the α and $\beta\gamma$ subunits of heterotrimeric GTP-binding proteins (G proteins) and does not associate with a p85 adaptor molecule. PI 3-kinase C2 γ , also designated p110 γ , may link signaling through G protein-coupled receptors to the generation of phosphoinositide second messengers that are phosphorylated in the D-3 position. The PI 3-kinase C2 γ gene encodes a 1,050-amino acid polypeptide with 36% identity to human PI 3-kinase C2 α . Research indicates that PI 3-kinase C2 γ can block the growth of human colon cancer cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PIK3C2G (human) mapping to 12p12.3; Pik3c2g (mouse) mapping to 6 G2.

SOURCE

PI 3-kinase C2 γ (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PI 3-kinase C2 γ 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-48634 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

PI 3-kinase C2 γ (K-16) is recommended for detection of PI 3-kinase C2 γ 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); may cross-react with PI-3 kinase C2 β .

PI 3-kinase C2 γ (K-16) is also recommended for detection of PI 3-kinase C2 γ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PI 3-kinase C2 γ siRNA (h): sc-61338, PI 3-kinase C2 γ siRNA (m): sc-61339, PI 3-kinase C2 γ shRNA Plasmid (h): sc-61338-SH, PI 3-kinase C2 γ shRNA Plasmid (m): sc-61339-SH, PI 3-kinase C2 γ shRNA (h) Lentiviral Particles: sc-61338-V and PI 3-kinase C2 γ shRNA (m) Lentiviral Particles: sc-61339-V.

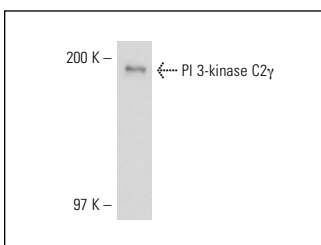
Molecular Weight of PI 3-kinase C2 γ : 120 kDa.

Positive Controls: ECV304 cell lysate: sc-2269 or rat brain extract: sc-2392.

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.

DATA



PI 3-kinase C2 γ (K-16): sc-48634. Western blot analysis of PI 3-kinase C2 γ expression in ECV304 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **PI 3-kinase C2 γ (3D8): sc-517028**, our highly recommended monoclonal alternative to PI 3-kinase C2 γ (K-16).