

# PI 3-kinase C2 $\gamma$ (3D8): sc-517028

## 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 $\gamma$  (PIK3CG) enzyme is activated *in vitro* by both the  $\alpha$  and  $\beta\gamma$  subunits of heterotrimeric GTP-binding proteins (G proteins) and does not associate with a p85 adaptor molecule. PI 3-kinase C2 $\gamma$ , also designated p110 $\gamma$ , 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 $\gamma$  gene encodes a 1,050-amino acid polypeptide with 36% identity to human PI 3-kinase C2 $\alpha$ . Research indicates that PI 3-kinase C2 $\gamma$  can block the growth of human colon cancer cells.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PIK3C2G (human) mapping to 12p12.3.

## SOURCE

PI 3-kinase C2 $\gamma$  (3D8) is a mouse monoclonal antibody raised against amino acids 2-100 representing partial length PI 3-kinase C2 $\gamma$  of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG $\gamma$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## 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 $\gamma$  (3D8) is recommended for detection of PI 3-kinase C2 $\gamma$  of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

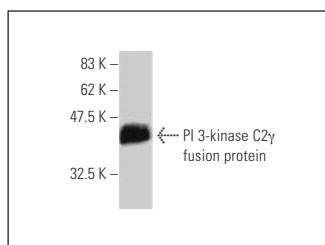
Molecular Weight of PI 3-kinase C2 $\gamma$ : 120 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



PI 3-kinase C2 $\gamma$  (3D8): sc-517028. Western blot analysis of human recombinant PI 3-kinase C2 $\gamma$  fusion protein.

## 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) for detailed protocols and support products.