

PI 4-kinase II β (C-24): sc-130232

BACKGROUND

Phosphatidylinositol (PI) kinases participate in the first step in activating important cellular effectors, such as PIP2 (phosphatidylinositol bisphosphate) and PTEN. Unlike other PI-kinases, PI 4-kinase family members only phosphorylate phosphatidylinositols, are potently inhibited by adenosine and lack a trans-membrane domain. Total PI 4-kinase activity is dependent upon PI 4-kinase β , PI 4-kinase α , PI 4-kinase II α and PI 4-kinase II β activities. PI 4-kinase II β (Phosphatidylinositol 4-kinase type II- β) is a 481 amino acid protein that is recruited to the membrane from the cytosol to stimulate synthesis of PIP2 and, in this way, PI 4-kinase II β contributes to the production of IP3. PI 4-kinase II β may also be involved in the regulation of vesicular trafficking due to its associations with the endoplasmic reticulum and the golgi apparatus. T-cells specific for PI 4-kinase II β lyse normal and malignant hematopoietic cells, suggesting that PI 4-kinase II β may play a role in antitumor immunity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PI4K2B (human) mapping to 4p15.2; Pi4k2b (mouse) mapping to 5 C1.

SOURCE

PI 4-kinase II β (C-24) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PI 4-kinase II β of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PI 4-kinase II β (C-24) is recommended for detection of PI 4-kinase II β of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PI 4-kinase II β siRNA (h): sc-89203, PI 4-kinase II β siRNA (m): sc-152244, PI 4-kinase II β shRNA Plasmid (h): sc-89203-SH, PI 4-kinase II β shRNA Plasmid (m): sc-152244-SH, PI 4-kinase II β shRNA (h) Lentiviral Particles: sc-89203-V and PI 4-kinase II β shRNA (m) Lentiviral Particles: sc-152244-V.

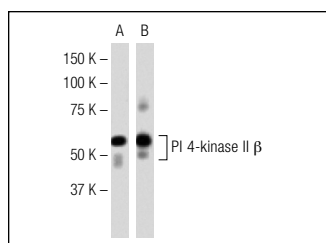
Molecular Weight of PI 4-kinase II β : 54 kDa.

Positive Controls: Saos-2 cell lysate: sc-2235 or mouse brain extract: sc-2253.

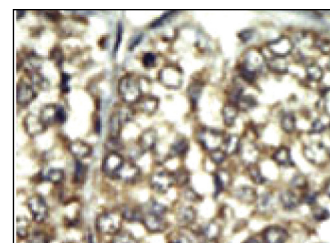
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PI 4-kinase II β (C-24): sc-130232. Western blot analysis of PI 4-kinase II β expression in mouse brain (A) and Saos-2 (B) whole cell lysates.



PI 4-kinase II β (C-24): sc-130232. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

RESEARCH USE

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