

PKN β (N-15): sc-67774

BACKGROUND

PKN β (protein kinase PKN β), also known as PKN3, is a protein kinase-related molecule belonging to the AGC serine/threonine protein kinase family. It contains one protein kinase domain, three REM repeats and one AGC-kinase domain at its C-terminus. PKN β is not expressed in normal adult tissues but is found in prostate tumors and various other cancer cell lines localizing to the nucleus and the perinuclear region of the cytoplasm. PKN β may play a role in the invasiveness of malignant prostate cancer. This is suggested by the impaired growth and reduced metastases formation after knockdown of PKN β expression in mouse prostate tumor cells. PKN β expression and activity is regulated by PI 3-kinase. In humans, the phosphorylation of PKN β at Thr-718 and Thr-860 is required for the activation of its kinase activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PKN3 (human) mapping to 9q34.11; Pkn3 (mouse) mapping to 2 B.

SOURCE

PKN β (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PKN β 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-67774 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PKN β (N-15) is recommended for detection of PKN β of mouse 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).

PKN β (N-15) is also recommended for detection of PKN β in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PKN β siRNA (h): sc-62822, PKN β siRNA (m): sc-62823, PKN β shRNA Plasmid (h): sc-62822-SH, PKN β shRNA Plasmid (m): sc-62823-SH, PKN β shRNA (h) Lentiviral Particles: sc-62822-V and PKN β shRNA (m) Lentiviral Particles: sc-62823-V.

Molecular Weight of PKN β : 99 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.

STORAGE

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

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.