## SANTA CRUZ BIOTECHNOLOGY, INC.

# WNK1 (S-15): sc-168111



## BACKGROUND

WNK1 (WNK lysine deficient protein kinase 1), also known as KDP (kinase deficient protein), PSK, erythrocyte 65 kDa protein (p65), HSN2, HSAN2 or PRKWNK1, is a 2,382 amino acid cytoplasmic protein that participates in cell signaling, proliferation and survival, and regulates electrolyte homeostasis. WNK1 belongs to the Ser/Thr protein kinase family of the protein kinase superfamily, and contains one protein kinase domain. Existing as five alternatively spliced isoforms, WNK1 is widely expressed but is found at highest levels in skeletal muscke, heart, testis and kidney. The gene that encodes WNK1 maps to human chromosome 12p13.33, and when defective, is the cause of an an autosomal dominant disease known as pseudohypoaldosteronism type II (PHAII), as well as a hereditary sensory and autonomic neuropathy type 2A (HSAN2A).

## REFERENCES

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- Veríssimo, F., et al. 2001. WNK kinases, a novel protein kinase subfamily in multi-cellular organisms. Oncogene 20: 5562-5569.
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- Delaloy, C., et al. 2003. Multiple promoters in the WNK1 gene: one controls expression of a kidney-specific kinase-defective isoform. Mol. Cell. Biol. 23: 9208-9221.
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#### CHROMOSOMAL LOCATION

Genetic locus: WNK1 (human) mapping to 12p13.33; Wnk1 (mouse) mapping to 6 F1.

#### SOURCE

WNK1 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WNK1 of human origin.

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168111 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

WNK1 (S-15) is recommended for detection of WNK1 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).

WNK1 (S-15) is also recommended for detection of WNK1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for WNK1 siRNA (h): sc-39256, WNK1 siRNA (m): sc-39257, WNK1 shRNA Plasmid (h): sc-39256-SH, WNK1 shRNA Plasmid (m): sc-39257-SH, WNK1 shRNA (h) Lentiviral Particles: sc-39256-V and WNK1 shRNA (m) Lentiviral Particles: sc-39257-V.

Molecular Weight of WNK1: 251 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) Immunofluo-rescence: 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.