

WNK4 Peptide

Subcategory: Synthetic Peptide, Blocking Peptide

Cat. No.: 350572

Unit: 0.1 mg

Description:

Ser/Thr-protein kinase WNK4 regulates the activity of the thiazide-sensitive Na-Cl cotransporter SLC12A3 by phosphorylation, which prevents membrane trafficking of SLC12A3. WNK4 also inhibits the renal potassium channel KCNJ1 via a kinase-independent mechanism by which it induces clearance of the protein from the cell surface by clathrin-dependent endocytosis. WNK4 acts as a molecular switch that can vary the balance between NaCl reabsorption and K⁺ secretion to maintain integrated homeostasis. WNK4 is exclusively present in intercellular junctions in the distal convoluted tubule and in both the cytoplasm and intercellular junctions in the cortical collecting duct. Defects in WNK4 are a cause of pseudohypoaldosteronism type II (PHAII).

Format: Each vial contains 0.1 ml peptide in deionized water for a final concentration of 1 mg/ml. Use at 5.6 ug/ml for a 100X excess over antibody for maximum blocking effect.

Alternate Names: WNK4; Ser/Thr-protein kinase WNK4; Serine/threonine-protein kinase WNK4; protein kinase with no lysine 4; protein kinase, lysine-deficient 4

Accession No.: Q96J92

MW: 1375.6 g/mol

Sequence: The synthetic peptide used to raise the antibody Cat. No. 250912 is selected from a sequence within the N-term region of mouse WNK4. For blocking experiments, a 10 to 100 fold molar excess to antibody is recommended.

Composition: C64H89N13O21

Purity: Purity > 80% by HPLC

Solubility: Distilled water for a solution up to 2 mg/ml, otherwise we recommend using acetonitrile.

Storage: Store at -20°C. The product is hygroscopic and must be protected from light. Product is guaranteed one year from the date of shipment. Following reconstitution, store at -20°C.

For research use only, not for diagnostic or therapeutic procedures.