

WNK1 Polyclonal Antibody

Catalog No: YT4906

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: WNK1

Gene Name: WNK1

Protein Name: Serine/threonine-protein kinase WNK1

Q9H4A3

P83741

Human Gene Id: 65125

Human Swiss Prot

No:

Mouse Gene ld: 232341

Mouse Swiss Prot

No:

Rat Gene Id: 116477

Rat Swiss Prot No: Q9JIH7

Immunogen: The antiserum was produced against synthesized peptide derived from human

WNK1. AA range:24-73

Specificity: WNK1 Polyclonal Antibody detects endogenous levels of WNK1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 230kD

Background: This gene encodes a member of the WNK subfamily of serine/threonine protein

kinases. The encoded protein may be a key regulator of blood pressure by controlling the transport of sodium and chloride ions. Mutations in this gene have been associated with pseudohypoaldosteronism type II and hereditary sensory neuropathy type II. Alternatively spliced transcript variants encoding different isoforms have been described but the full-length nature of all of them has yet to be

determined.[provided by RefSeq, May 2010],

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein.,caution:Cys-250 is

present instead of the conserved Lys which is expected to be an active site

residue. Lys-233 appears to fulfill the required catalytic

function.,caution:PubMed:2507249 describes a peptide sequence containing a GlcNAc glycosylated Ser in position 164 while it is an Arg residue according to

others.,cofactor:Magnesium.,disease:Defects in WNK1 are a cause of

pseudohypoaldosteronism type II (PHAII) [MIM:145260]. PHAII is an autosomal dominant disease characterized by severe hypertension, hyperkalemia, and sensitivity to thiazide diuretics which may result from a chloride shunt in the renal

distal nephron.,enzyme regulation:By hypertonicity. Activation requires autophosphorylation of Ser-382. Phosphorylation of Ser-378 also promotes increased activity.,function:Controls sodium and chloride ion transport by inhibiti

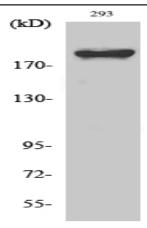
Subcellular Location:

Cytoplasm.

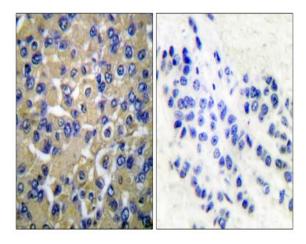
Expression:

Widely expressed, with highest levels observed in the testis, heart, kidney and skeletal muscle. Isoform 3 is kidney-specific and specifically expressed in the distal convoluted tubule (DCT) and connecting tubule (CNT) of the nephron.

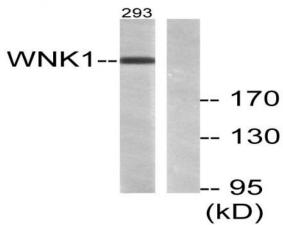
Products Images



Western Blot analysis of various cells using WNK1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using WNK1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, treated with EGF 200ng/ml 30', using WNK1 Antibody. The lane on the right is blocked with the synthesized peptide.