

Rabbit WNK1 Polyclonal Antibody | anti-WNK1 antibody

WNK1 Antibody

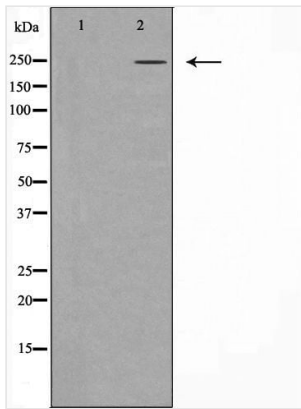
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326771	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

WNK1; Polyclonal Antibody; WNK1 Antibody; Erythrocyte 65 kDa protein; HSN2; HSN2; hWNK1; KDP; KIAA0344; Kinase deficient protein; MGC163339; MGC163341; p65; PPP1R167; PRKWINK1; Prostate derived sterile 20 like kinase; Protein kinase lysine deficient 1; Protein kinase lysine-deficient 1; Protein kinase with no lysine 1; Protein phosphatase 1; regulatory subunit 167; PSK; Serine/threonine protein kinase WNK1 1; Serine/threonine protein kinase WNK1 2; Serine/threonine protein kinase WNK1; Serine/threonine-protein kinase WNK1; With no K; WNK lysine deficient protein kinase 1; WNK lysine deficient protein kinase 1 isoform; WNK1_HUMAN; anti-WNK1 antibody

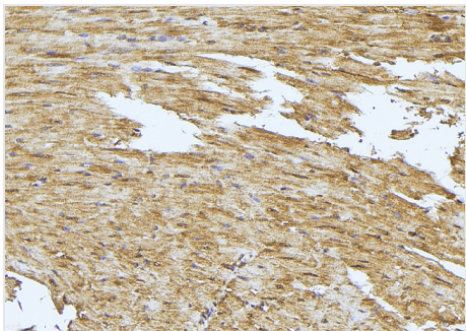
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	WNK1 antibody detects endogenous levels of total WNK1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	2642
Applicable Applications for anti-WNK1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human WNK1
Subcellular Location	Cytoplasm.
Tissue Specificity	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.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



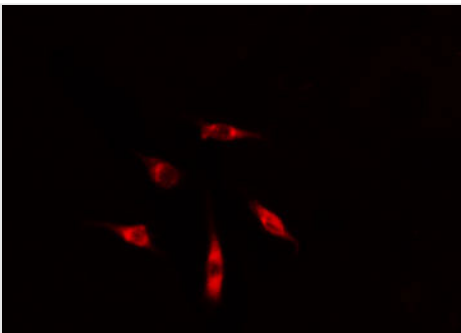
WB (Western Blot)

Western blot analysis of 293 cell extracts treated with EGF (200ng/ml, 30mins), using WNK1 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326771 at 1/100 staining Mouse muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)

AAA326771 staining 293 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-WNK1 antibody

Description: 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.

Function: Serine/threonine kinase which plays an important role in the regulation of electrolyte homeostasis, cell signaling, survival, and proliferation. Acts as an activator and inhibitor of sodium-coupled chloride cotransporters and potassium-coupled chloride cotransporters respectively. Activates SCNN1A, SCNN1B, SCNN1D and SGK1. Controls sodium and chloride ion transport by inhibiting the activity of WNK4, by either phosphorylating the kinase or via an interaction between WNK4 and the autoinhibitory domain of WNK1. WNK4 regulates the activity of the thiazide-sensitive Na-Cl cotransporter, SLC12A3, by phosphorylation. WNK1 may also play a role in actin cytoskeletal reorganization. Phosphorylates NEDD4L. Acts as a scaffold to inhibit SLC4A4, SLC26A6 as well as CFTR activities and surface expression, recruits STK39 which mediates the inhibition (By similarity).

Subunit Structure: Interacts with SYT2 (By similarity). Interacts with WNK3 and WNK4 (By similarity). Interacts with KLHL3 (PubMed:23387299, PubMed:23576762). Isoform 3: Interacts with isoform 1 (By similarity).

Post-translational Modifications: Autophosphorylation at Ser-382 is inhibited by intracellular calcium. May be O-glycosylated. Ubiquitinated in vitro by the BCR(KLHL3) complex and in vivo by a BCR(KLHL2) complex, leading to proteasomal degradation.

Similarity: Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. WNK subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	296939600
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NCBI GeneID	65125
NCBI Accession #	NP_001171914.1
NCBI GenBank Nucleotide #	NM_001184985.1
UniProt Accession #	Q9H4A3; O15052; P54963; Q4VBX9; Q6IFS5; Q86WL5; Q8N673; A1L4B0; C5HTZ5; C5HTZ6; C5HTZ7; H6WZW3
Molecular Weight	Observed: 250 kDa Predicted: 251 kDa
NCBI Official Full Name	serine/threonine-protein kinase WNK1 isoform 4
NCBI Official Synonym Full Names	WNK lysine deficient protein kinase 1
NCBI Official Symbol	WNK1
NCBI Official Synonym Symbols	KDP; PSK; p65; HSN2; HSN2; PRKWNK1; PPP1R167
NCBI Protein Information	serine/threonine-protein kinase WNK1
UniProt Protein Name	Serine/threonine-protein kinase WNK1
UniProt Gene Name	WNK1
UniProt Synonym Gene Names	HSN21 PublicationManual assertion based on opinion iniRef.11; hWNK1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/wnk1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326771>