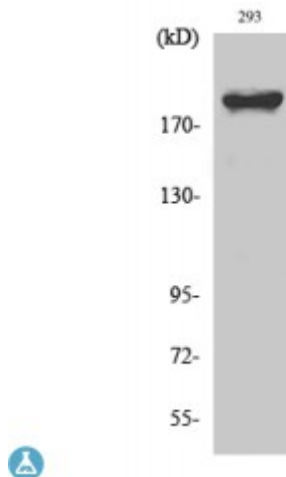


Anti-WNK1 antibody



Description	Rabbit polyclonal to WNK1.
Model	STJ96271
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human WNK1 around the non-phosphorylation site of T60.
Immunogen Region	40-120 aa
Gene Symbol	WNK1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000
Specificity	WNK1 Polyclonal Antibody detects endogenous levels of WNK1 protein.
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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Serine/threonine-protein kinase WNK1 Erythrocyte 65 kDa protein p65 Kinase deficient protein Protein kinase lysine-deficient 1 Protein kinase with no lysine 1 hWNK1
Molecular Weight	230 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	NAa href="https://www.omim.org/entry/201300" Target="_blank">OMIM:201300
Alternative Names	Serine/threonine-protein kinase WNK1 Erythrocyte 65 kDa protein p65 Kinase deficient protein Protein kinase lysine-deficient 1 Protein kinase with no lysine 1 hWNK1
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 . Isoform 3: Dominant-negative regulator of the longer isoform 1. Does not have kinase activity, does not directly inhibit WNK4 and has no direct effect on sodium and chloride ion transport. Downregulates sodium-chloride cotransporter activity indirectly by inhibiting isoform 1, it associates with isoform 1 and attenuates its kinase activity. In kidney, may play an important role regulating sodium and potassium balance.
Cellular Localization	Cytoplasm
Post-translational Modifications	O-glycosylated. Ubiquitinated in vitro by the BCR(KLHL3) complex and in vivo by a BCR(KLHL2) complex, leading to proteasomal degradation.