WNK4 Monoclonal Antibody

Catalog No	BYmab-06144
Isotype	IgG
Reactivity	Human;Rat;Mouse
Applications	WB
Gene Name	WNK4 PRKWNK4
Protein Name	Serine/threonine-protein kinase WNK4 (EC 2.7.11.1) (Protein kinase lysine-deficient 4) (Protein kinase with no lysine 4)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	WNK4 Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	136kD
Cell Pathway	Cell junction, tight junction . Present exclusively in intercellular junctions in the distal convoluted tubule and in both the cytoplasm and intercellular junctions in the cortical collecting duct. WNK4 is part of the tight junction complex. .
Tissue Specificity	Expressed in kidney, colon and skin.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,caution:Cys-203 is present instead of the conserved Lys which is expected to be an active site residue. Lys-186 appears to fulfill the required catalytic function.,cofactor:Magnesium.,disease:Defects in WNK4 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:Activation requires autophosphorylation of Ser-335. Phosphorylation of Ser-331 also promotes increased activity.,function:Regulates the activity of the thiazide-sensitive Na-Cl

	cotransporter, SLC12A3, by phosphorylation which appears to prevent membrane trafficking of SLC12A3. Also inhibits the renal K(+) channel, KCNJ1, via a kinase-independent
Background	This gene encodes a member of the WNK family of serine-threonine protein kinases. The kinase is part of the tight junction complex in kidney cells, and regulates the balance between NaCl reabsorption and K(+) secretion. The kinase regulates the activities of several types of ion channels, cotransporters, and exchangers involved in electrolyte flux in epithelial cells. Mutations in this gene result in pseudohypoaldosteronism type IIB.[provided by RefSeq, Sep 2009],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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