abcam

Product datasheet

Anti-WNK1 antibody ab233266

3 Images

Overview

Product name Anti-WNK1 antibody

Description Rabbit polyclonal to WNK1

Host species Rabbit

Tested applications
Suitable for: WB, IHC-P
Species reactivity
Reacts with: Human, Pig

Predicted to work with: Mouse

Immunogen Recombinant fragment (His-T7-tag) corresponding to Human WNK1 aa 1950-2250. Expressed in

E. coli. N-terminal tags. Database link: **Q9H4A3**

Run BLAST with
Run BLAST with

Positive control WB: Recombinant human WNK1 protein. HEK-293T cell lysate. Pig liver and kidney tissue lysate.

IHC-P: Human testis tissue.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 44.12% PBS, 55.77% Glycerol (glycerin, glycerine)

Purity Protein A purified

Purification notesAntigen-specific affinity chromatography followed by Protein A affinity chromatography.

Clonality Polyclonal

1

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab233266 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes	
WB		Use a concentration of 1 - 5 μg/ml.	
IHC-P		Use a concentration of 5 - 20 µg/ml.	

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-CI 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.

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.

Involvement in disease

Pseudohypoaldosteronism 2C

Neuropathy, hereditary sensory and autonomic, 2A

Sequence similarities

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

Contains 1 protein kinase domain.

Post-translational modifications

O-glycosylated.

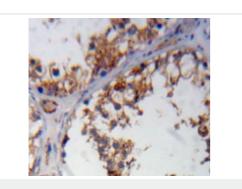
 $\label{lem:complex} \mbox{Ubiquitinated in vitro by the BCR(KLHL3) complex and in vivo by a BCR(KLHL2) complex,}$

leading to proteasomal degradation.

Cellular localization

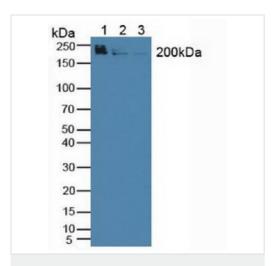
Cytoplasm.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-WNK1 antibody (ab233266)

Formalin-fixed, paraffin-embedded human testis tissue stained for WNK1 with ab233266 at 20 $\mu g/ml$ in immunohistochemical analysis. DAB staining.



Western blot - Anti-WNK1 antibody (ab233266)

All lanes : Anti-WNK1 antibody (ab233266) at 2 $\mu g/ml$

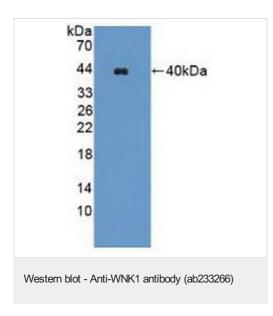
Lane 1: HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lane 2 : Pig liver tissue lysate

Lane 3 : Pig kidney tissue lysate

Secondary

All lanes: HRP-linked Guinea pig anti-Rabbit at 1/2000 dilution



Anti-WNK1 antibody (ab233266) at 2 $\mu g/ml$ + Recombinant human WNK1 protein

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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