# abcam

# Product datasheet

# Recombinant human WNK1 protein ab105196

# 2 图像

概述

产品名称 重组人WNK1蛋白

**蛋白长度** Protein fragment

描述

性质 Recombinant

来源 Baculovirus infected Sf9 cells

氨基酸序列

Accession Q9H4A3

种属 Human

分子量 67 kDa including tags

**氨基酸** 181 to 507

技术指标

Our Abpromise guarantee covers the use of ab105196 in the following tested applications.

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

生物活性 The Specific activity of ab105196 was determined to be 30 nmol/min/mg.

应**用** Western blot

Functional Studies

SDS-PAGE

纯**度** > 95 % SDS-PAGE.

Purity was determined to be >95% by densitometry.

形式 Liquid

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

Preservative: None

Constituents: 25% Glycerol, 50mM Tris HCI, 150mM Sodium chloride, 10mM Glutathione,

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This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 常规信息

#### 功能

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.

#### 组织特异性

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.

#### 疾病相关

Pseudohypoaldosteronism 2C

Neuropathy, hereditary sensory and autonomic, 2A

#### 序列相似性

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

Contains 1 protein kinase domain.

翻译后修饰

O-glycosylated.

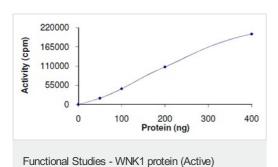
Ubiquitinated in vitro by the BCR(KLHL3) complex and in vivo by a BCR(KLHL2) complex,

leading to proteasomal degradation.

#### 细胞定位

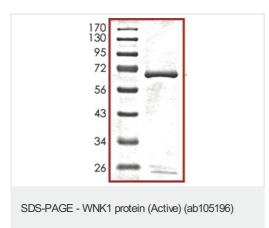
Cytoplasm.

#### 图片



The Specific activity of ab105196 was determined to be 30 nmol/min/mg.

(ab105196)



SDS-PAGE showing ab105196 at approximately 67kDa.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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