abcam

Product datasheet

Recombinant human SGK1 protein ab60883

5 图像

描述

产品名称 重组人SGK1蛋白

生物活性 Specific Activity: 117 nmol/min/mg.

纯**度** > 95 % SDS-PAGE.

Purity: >95% as determined by densitometry. Affinity purified.

表达系统 Baculovirus infected Sf9 cells

Accession <u>O00141-1</u>

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

 种属
 Human

 预测分子量
 73 kDa

 氨基酸
 60 to 431

标签 GST tag N-Terminus

额外的序列信息 Recombinant fragment, corresponding to amino acids 60-end of Human SGK1.

技术指标

Our **Abpromise guarantee** covers the use of **ab60883** in the following tested applications.

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

应**用** SDS-PAGE

Functional Studies

形式 Liquid

补充说明 <u>ab204849</u> (AKT1 peptide) can be utilized as a substrate for assessing kinase activity

制备和贮存

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

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292%

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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

Protein kinase that plays an important role in cellular stress response. Activates certain potassium, sodium, and chloride channels, suggesting an involvement in the regulation of processes such as cell survival, neuronal excitability and renal sodium excretion. Sustained high levels and activity may contribute to conditions such as hypertension and diabetic nephropathy. Mediates cell survival signals, phosphorylates and negatively regulates pro-apoptotic FOXO3A. Phosphorylates NEDD4L, which leads to its inactivation and to the subsequent activation of various channels and transporters such as ENaC, KCNA3/Kv1.3 or EAAT1. Isoform 2 exhibited a greater effect on cell plasma membrane expression of ENaC and Na(+) transport than isoform 1.

组织特异性

Expressed in most tissues with highest levels in the pancreas, followed by placenta, kidney and lung. Isoform 2 is strongly expressed in brain and pancreas, weaker in heart, placenta, lung, liver and skeletal muscle.

序列相似性

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.

Contains 1 AGC-kinase C-terminal domain.

Contains 1 protein kinase domain.

结构域

lsoform 2 subcellular localization at the plasma membrane is mediated by the sequences within the first 120 amino acids.

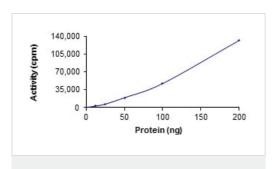
翻译后修饰

Regulated by phosphorylation. Phosphoinositide 3-kinase (Pi3-kinase) pathway promotes phosphorylation at Ser-422 which in turn increases the phosphorylation of Thr-256 by PDPK1. Ubiquitinated by NEDD4L; which promotes proteasomal degradation. Ubiquitinated by SYVN1 at the endoplasmic reticulum; which promotes rapid proteasomal degradation and maintains a high turnover rate in resting cells. Isoform 2 shows enhanced stability. Isoform 2 resistance to proteasomal degradation is mediated by the sequences within the first 120-amino acid.

细胞定位

Cell membrane and Cytoplasm. Nucleus. Endoplasmic reticulum. Nuclear, upon phosphorylation.

图片



The specific activity of SGK1 (ab60883) was determined to be 99 nmol/min/mg as per activity assay protocol

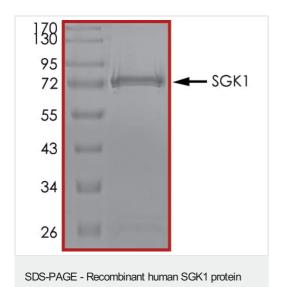
Functional Studies - Recombinant human SGK1 protein (ab60883)



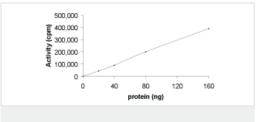
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SDS PAGE analysis of ab60883



SDS PAGE analysis of ab60883



Sample Kinase Activity Plot.

Functional Studies - Recombinant human SGK1 protein (ab60883)



ab60883 on SDS-PAGE, MW ~73 kDa.

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

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