# abcam

## Product datasheet

## Anti-SGK1 antibody ab59337

## 28 References 4 图像

#### 概述

产**品名称** Anti-SGK1抗体

描述 兔多克隆抗体to SGK1

**宿主** Rabbit

特异性 Detects endogenous levels of total SGK protein.

经测试应用 适用于: ICC/IF, WB, IHC-P

种属反应性 与反应: Human

免疫原 Synthesized non-phosphopeptide derived from human SGK1 around the phosphorylation site of

serine 78 (P-P-SP-P-S).

常规说明

The 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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 50% Glycerol, 0.87% Sodium chloride

纯**度** Immunogen affinity purified

应用

The Abpromise guarantee Abpromise™承诺保证使用ab59337于以下的经测试应用

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#### "应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 1 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 55 kDa (predicted molecular weight: 49 kDa).
IHC-P		1/50 - 1/100.

***	1-

#### 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

Isoform 2 subcellular localization at the plasma membrane is mediated by the sequences within

the first 120 amino acids.

#### 翻译后修饰

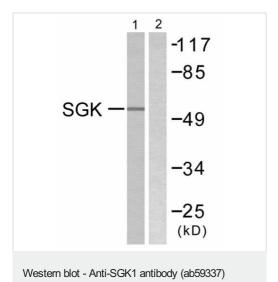
Regulated by phosphorylation. Phosphoinositide 3-kinase (PI3-kinase) pathway promotes phosphorylation at Ser-422 which in turn increases the phosphorylation of Thr-256 by PDPK1. Ubiquitinated by NEDD4L; which promotes proteasomal degradation. Ubiquitinated by SYVN1 at the endoplasmic reticulum; which 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



All lanes: Anti-SGK1 antibody (ab59337) at 1/500 dilution

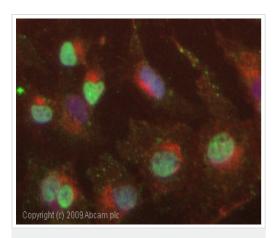
Lane 1: 293 cells treated

with heat shock

Lane 2: 293 cells treated

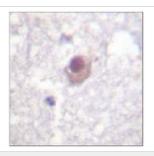
with heat shock with immunizing non-phosphopeptide

**Predicted band size:** 49 kDa **Observed band size:** 55 kDa



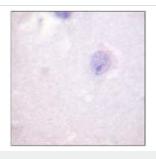
Immunocytochemistry/ Immunofluorescence - Anti-SGK1 antibody (ab59337)

ICC/IF image of ab59337 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab59337, 1 $\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SGK1 antibody (ab59337)

ab59337, at a 1/50-1/100 dilution, staining SGK1 in Human brain sections.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SGK1 antibody (ab59337)

ab59337, at a 1/50-1/100 dilution, staining SGK1 in Human brain sections, in the presence of the immunizing peptide.

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

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