


Product datasheet

Anti-SGK1 antibody [Y238] ab32374

Recombinant **RabMAb**

[18 References](#) [4 Images](#)

Overview

Product name	Anti-SGK1 antibody [Y238]
Description	Rabbit monoclonal [Y238] to SGK1
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P Unsuitable for: ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: A431 and NIH3T3 cell lysates. IHC-P: Human kidney carcinoma.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	Y238
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab32374 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
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/500. Detects a band of approximately 57 kDa (predicted molecular weight: 49 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes

Is unsuitable for ICC/IF.

Target

Function

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.

Tissue specificity

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.

Sequence similarities

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.
Contains 1 AGC-kinase C-terminal domain.
Contains 1 protein kinase domain.

Domain

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

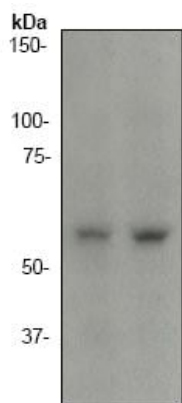
Post-translational modifications

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.

Cellular localization

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

Images



Western blot - Anti-SGK1 antibody [Y238] (ab32374)

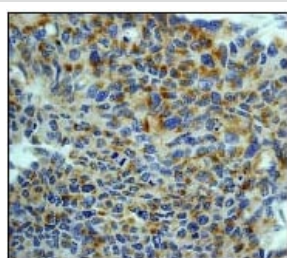
All lanes : Anti-SGK1 antibody [Y238] (ab32374) at 1/500 dilution

Lane 1 : A431 cell lysate

Lane 2 : NIH3T3 cell lysate

Predicted band size: 49 kDa

Observed band size: 57 kDa

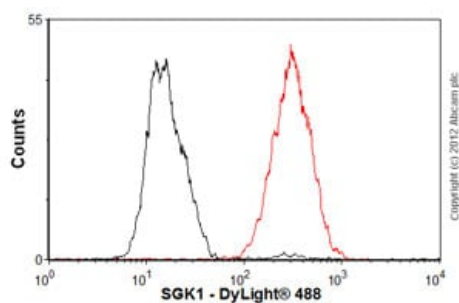


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SGK1 antibody [Y238] (ab32374)

Ab32374, at a 1/50 dilution, staining SGK1 in paraffin embedded human kidney carcinoma tissue sections by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-SGK1 antibody [Y238] (ab32374)

Overlay histogram showing HEK293 cells stained with ab32374 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32374, 1/100) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-SGK1 antibody [Y238] (ab32374)

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