SGK1 (Phospho Ser422) Rabbit pAb

CatalogNo: YP0244 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 57kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
ELISA 1:40000
IF 1:50-200

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human SGK around the phosphorylation site of Ser422. AA range:381-430

Specificity	Phospho-SGK1 (S422) Polyclonal Antibody detects endogenous levels of SGK1 protein only when phosphorylated at S422.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):GFsYA

Target Information

Gene name	SGK1
Protein Name	Serine/threonine-protein kinase Sgk1

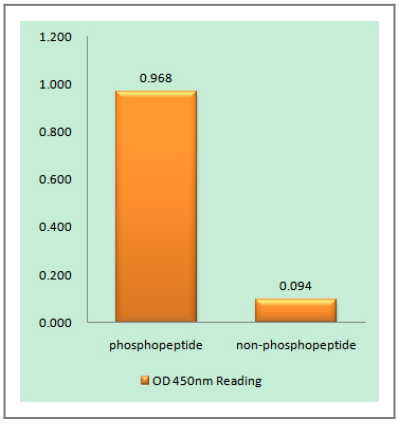
Organism	Gene ID	UniProt ID
Human	6446;	O00141;
Mouse	20393;	Q9WVC6;
Rat		Q06226;

Cellular Localization	Cytoplasm. Nucleus. Endoplasmic reticulum membrane. Cell membrane. Mitochondrion. The subcellular localization is controlled by the cell cycle , as well as by exposure to specific hormones and environmental stress stimuli. In proliferating cells , it shuttles between the nucleus and cytoplasm in synchrony with the cell cycle , and in serum/growth factor-stimulated cells it resides in the nucleus. In contrast , after exposure to environmental stress or treatment with glucocorticoids , it is detected in the cytoplasm and with certain stress conditions is associated with the mitochondria. In osmoregulation through the epithelial sodium channel , it can be localized to the cytoplasmic surface of the cell membrane. Nuclear , upon phosphorylation.; [Isoform 2]: Cell membrane.
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.

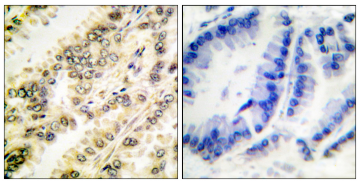
Function

Catalytic activity:ATP + a protein = ADP + a phosphoprotein. ,enzyme regulation:Two specific sites , one in the kinase domain (Thr-256) and the other in the C-terminal regulatory region (Ser-422) , need to be phosphorylated for its full activation. ,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 , Kv1.3 , or EAAT1. ,induction:By serum and/or glucocorticoids. By excessive extracellular glucose and by TGF-beta , in cultured cells. ,PTM: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. ,PTM: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. ,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. ,similarity:Contains 1 AGC-kinase C-terminal domain. ,similarity:Contains 1 protein kinase domain. ,subcellular location:Nuclear , upon phosphorylation. ,subunit:Interacts with NEDD4 and NEDD4L. ,tissue specificity:Expressed in most tissues with highest levels in the pancreas , followed by placenta , kidney and lung. ,

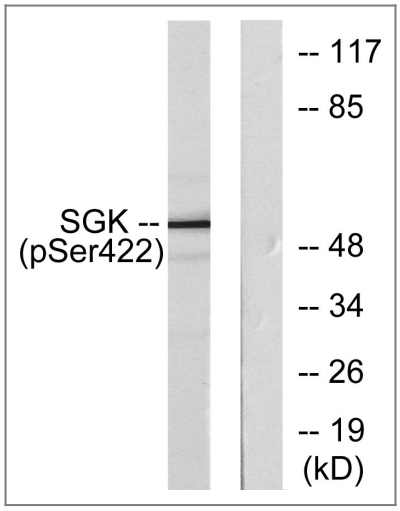
Validation Data



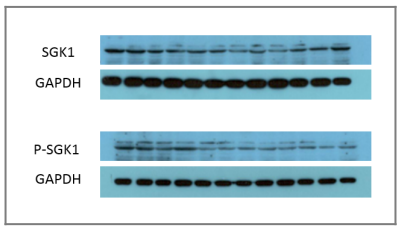
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SGK (Phospho-Ser422) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using SGK (Phospho-Ser422) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with Insulin 0.01U/ml 15', using SGK (Phospho-Ser422) Antibody. The lane on the right is blocked with the phospho peptide.



The picture was kindly provided by our customer. Primary antibody was diluted at 1:2000. Loading control antibody was diluted at 1:20000

Contact information

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Please scan the QR code to access additional product information:
SGK1 (Phospho Ser422) Rabbit pAb

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