

**Product Name: SGK1 (phospho Ser78) Rabbit Polyclonal Antibody**  
**Catalog #: APRab05412**

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## Summary

<b>Production Name</b>	SGK1 (phospho Ser78) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	ELISA, WB,
<b>Reactivity</b>	Human, Mouse, Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	SGK1
<b>Alternative Names</b>	SGK1; SGK; Serine/threonine-protein kinase Sgk1; Serum/glucocorticoid-regulated kinase 1
<b>Gene ID</b>	6446.0
<b>SwissProt ID</b>	O00141. The antiserum was produced against synthesized peptide derived from human SGK around the phosphorylation site of Ser78. AA range:41-90

## Application

<b>Dilution Ratio</b>	WB 1:500-2000 ELISA 2000-20000
<b>Molecular Weight</b>	54kD

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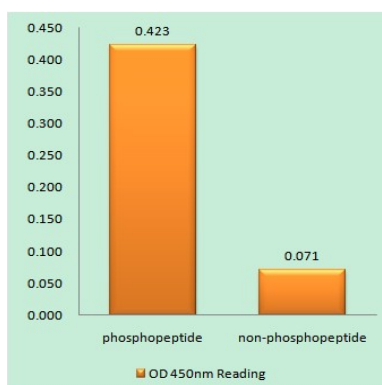
## Background

This gene encodes a serine/threonine protein kinase that plays an important role in cellular stress response. This kinase 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. High levels of expression of this gene may contribute to conditions such as hypertension and diabetic nephropathy. Several alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jan 2009], 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.,

## Research Area

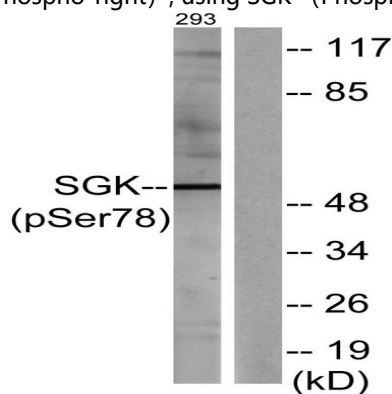
Aldosterone-regulated sodium reabsorption;

## Image Data

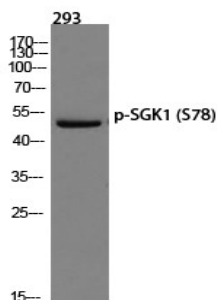


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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SGK (Phospho-Ser78) Antibody



Western blot analysis of lysates from 293 cells treated with UV 15', using SGK (Phospho-Ser78) Antibody. The lane on the right is blocked with the phospho peptide.



Western blot analysis of 293 using p-SGK1 (S78) antibody. Antibody was diluted at 1:2000

## Note

For research use only.