



SGK1 (phospho Ser422) Polyclonal Antibody

Catalog No	YP-Ab-14349
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	SGK1
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.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:2.7.11.1;Serine/threonine-protein kinase Sgk1;Serum/glucocorticoid-regulated kinase 1;SGK;SGK1
Observed Band	57kD
Calculated Molecular Weight	57kD
Cell Pathway	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 a

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],

matters needing attention

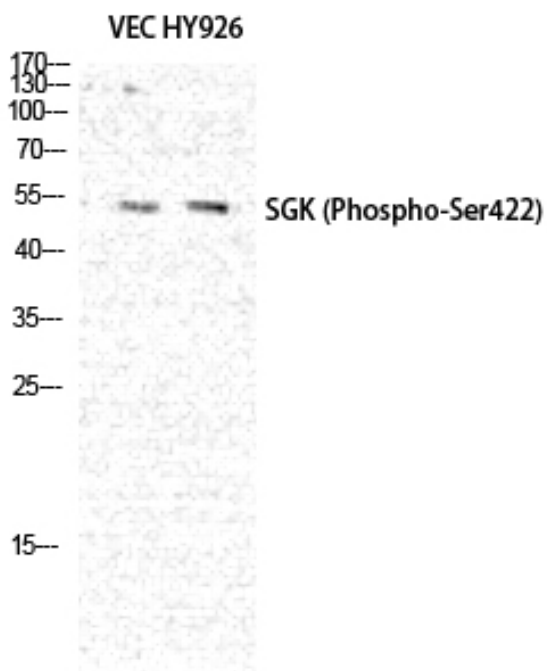
Avoid repeated freezing and thawing!

Usage suggestions

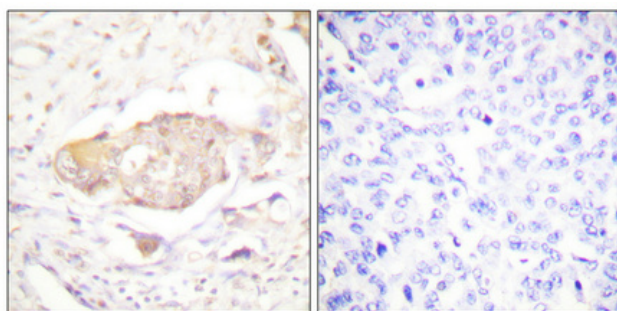
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



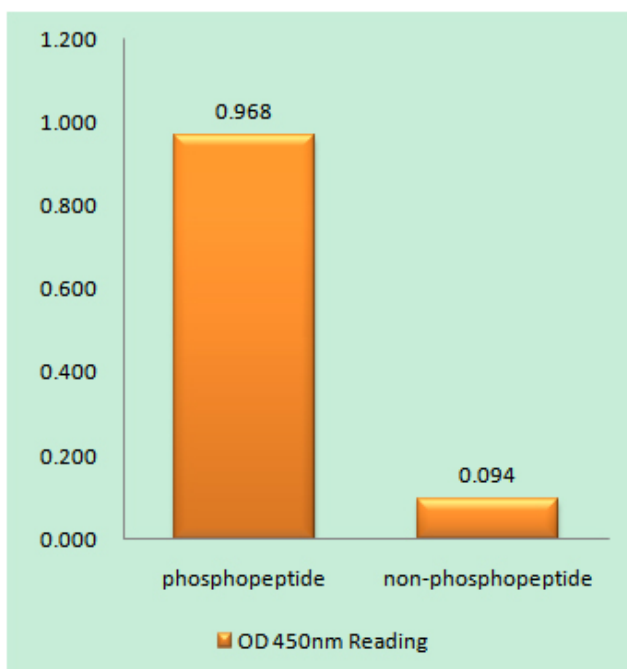
Products Images



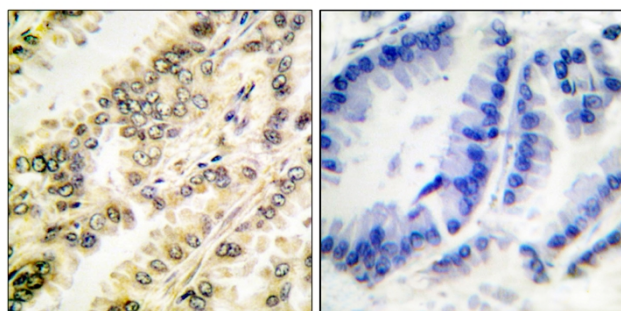
Western Blot analysis of VEC HY926 cells using Phospho-SGK1 (S422) Polyclonal Antibody diluted at 1:500



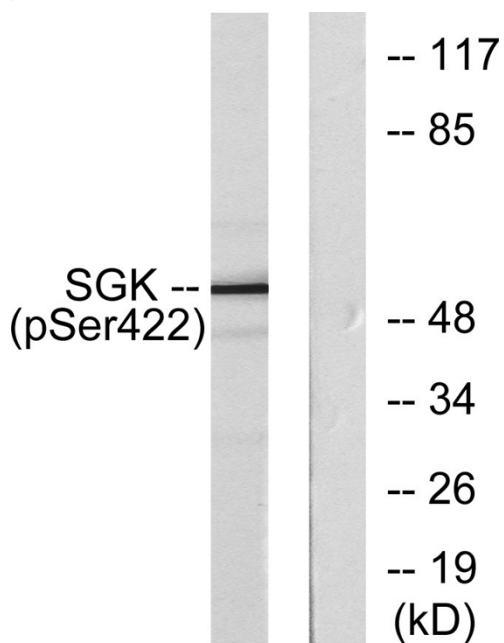
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



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.