

SGK1 (phospho Ser422) Polyclonal Antibody

Catalog No :	YP0244
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	SGK1
Fields :	>>FoxO signaling pathway;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Aldosterone-regulated sodium reabsorption
Gene Name :	SGK1
Protein Name :	Serine/threonine-protein kinase Sgk1
Human Gene Id :	6446
Human Swiss Prot No :	O00141
Mouse Gene Id :	20393
Mouse Swiss Prot No :	Q9WVC6
Rat Swiss Prot No :	Q06226
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
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year (Do not lower than -25°C)

Observed Band : 57kD

Cell Pathway : Aldosterone-regulated sodium reabsorption;

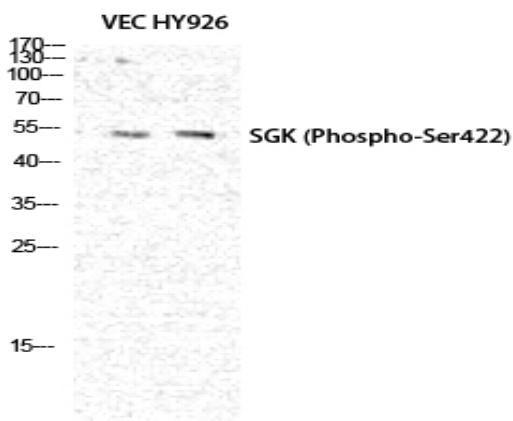
Background : This gene encodes a serine/threonine protein kinase that plays an important role in cellular stress response. This kinase activates certain potassium, sodium, and chloride channels, suggesting an involvement in the regulation of processes such as cell survival, neuronal excitability, and 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],

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

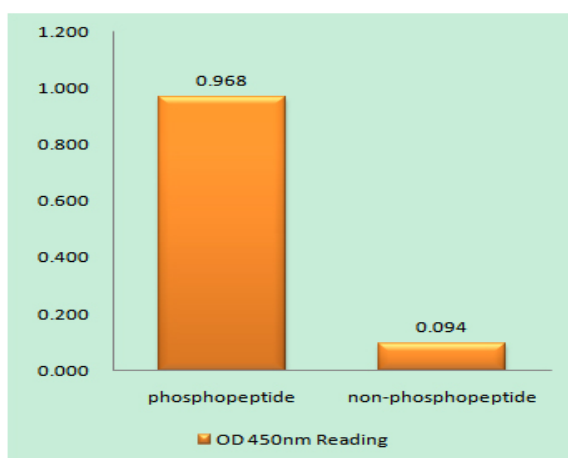
Subcellular Location : Cytoplasm. Nucleus. Endoplasmic reticulum membrane. Cell membrane. Mitochondrion. The subcellular localization is controlled by the cell cycle, as well as by exposure to specific hormones and environmental stress stimuli. In proliferating cells, it shuttles between the nucleus 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.

Expression : 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.

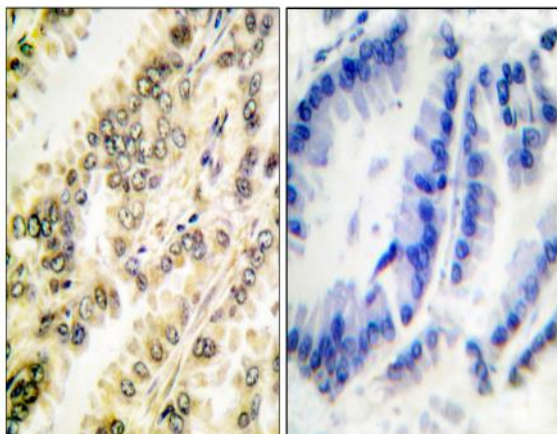
Products Images



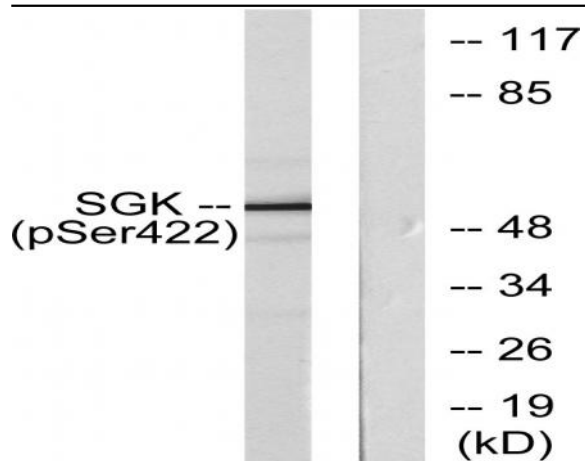
Western Blot analysis of VEC HY926 cells using Phospho-SGK1 (S422) Polyclonal Antibody diluted at 1:500



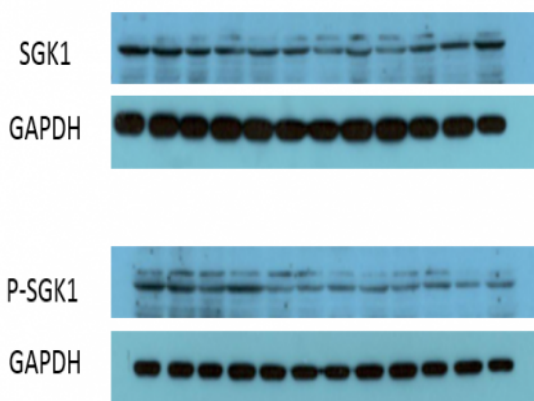
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using SGK (Phospho-Ser422) Antibody



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