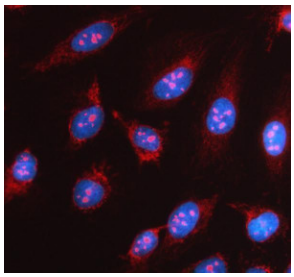
SGK1 Antibody / Serine/Threonine Protein Kinase Antibody (R31780)

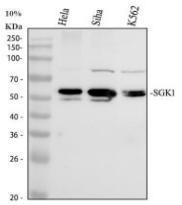
Catalog No.	Formulation	Size
R31780	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O00141
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml
Limitations	This SGK1 Antibody / Serine/Threonine Protein Kinase Antibody is available for research use only.



SGK1 Antibody HeLa Cell IF. Immunofluorescent staining of HeLa cells was performed with SGK1 Antibody / Serine/Threonine Protein Kinase Antibody (red) following enzyme-mediated antigen retrieval for 15 minutes, with DAPI used as a nuclear counterstain (blue). The image demonstrates predominantly cytoplasmic staining with perinuclear enrichment and relatively little nuclear signal, consistent with the known intracellular localization of SGK1 under basal conditions. This SGK1 Antibody supports immunofluorescence studies of serine/threonine protein kinase signaling, cellular stress responses, and cancer cell biology.



SGK1 Antibody Human Cancer Cell WB. Western blot analysis of SGK1 Antibody / Serine/Threonine Protein Kinase Antibody detected a prominent band at approximately 59 kDa in human cancer cell lysates, compared with the predicted molecular weight of approximately 49 kDa. Lanes: (1) human HeLa, (2) human SiHa, and (3) human K562 lysates. The upward mobility shift is consistent with post-translational modification of SGK1, particularly phosphorylation, which is known to alter its apparent molecular weight during SDS-PAGE. This SGK1 Antibody supports western blot studies of serine/threonine protein kinase signaling and SGK1 activation in human cancer cell models.

Description

SGK1 Antibody / Serine/Threonine Protein Kinase Antibody recognizes SGK1, a member of the AGC family of serine/threonine protein kinases that serves as an important downstream effector of phosphoinositide 3-kinase signaling. SGK1 expression is rapidly induced by serum, glucocorticoids, mineralocorticoids, insulin, growth factors, and numerous environmental stressors, enabling cells to rapidly adapt to changing physiological conditions. Following activation by mTORC2- and PDK1-dependent phosphorylation, SGK1 regulates diverse signaling pathways that influence proliferation, survival, metabolism, and ion transport.

As a serine/threonine protein kinase, SGK1 phosphorylates a broad range of substrates involved in transcriptional regulation, membrane transporter activity, apoptosis, and cytoskeletal organization. Among its best-characterized functions is the regulation of epithelial sodium channel activity in the kidney, contributing to sodium reabsorption, electrolyte balance, and blood pressure control. SGK1 also modulates FOXO transcription factors, glycogen synthase kinase 3, NDRG1, and additional signaling proteins that coordinate cellular responses to hormonal stimulation and stress.

Abnormal SGK1 expression or activity has been associated with numerous pathological conditions including hypertension, diabetes, obesity, chronic kidney disease, fibrosis, inflammatory disorders, and many human cancers. Increased SGK1 signaling can promote tumor cell proliferation, migration, survival, and resistance to chemotherapy or targeted therapies, making the kinase an active area of translational research. Ongoing studies continue to define the role of SGK1 in cardiovascular biology, renal physiology, immune regulation, and cancer progression while evaluating SGK1 as a potential therapeutic target.

An SGK1 Antibody is a valuable reagent for detecting endogenous SGK1 by western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation, flow cytometry, and related applications. A Serine/Threonine Protein Kinase Antibody also supports investigations of intracellular signaling pathways, cellular stress responses, metabolism, and disease mechanisms involving SGK1.

For additional information about SGK1 biology, hormone-responsive signaling pathways, and the full research applications of this target, see our SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody page.

Application Notes

Optimal dilution of the SGK1 Antibody / Serine/Threonine Protein Kinase Antibody should be determined by the researcher.

Immunogen

Amino acids MKQRRMGLNDFIQKIANNSYACKHPEVQ of human SGK1 were used as the immunogen for the SGK1 antibody.

Storage

After reconstitution, the SGK1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

SGK1 antibody, Serum and Glucocorticoid Regulated Kinase 1 antibody, Serine/Threonine Protein Kinase SGK1 antibody, SGK antibody

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