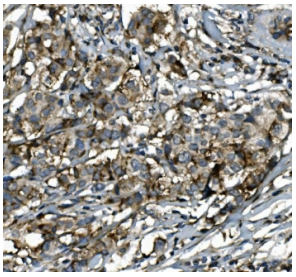
SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody (RQ5922)

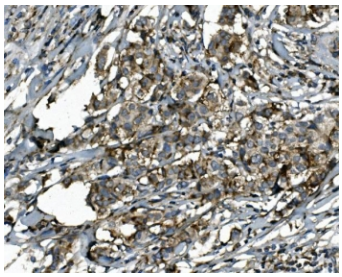
Catalog No.	Formulation	Size
RQ5922	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

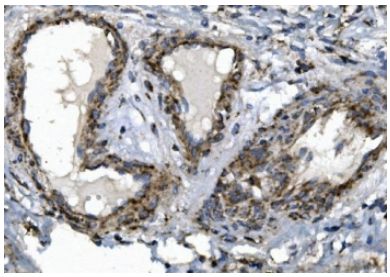
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	O00141
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody is available for research use only.



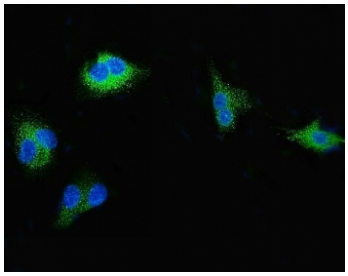
SGK1 Antibody Breast Cancer Immunohistochemistry. FFPE human breast cancer tissue was stained with SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody following heat-induced epitope retrieval by boiling sections in pH8 EDTA buffer for 20 minutes and allowing them to cool before staining. The image demonstrates moderate to strong predominantly cytoplasmic staining in malignant epithelial cells with comparatively low background in the surrounding stromal tissue, consistent with the known subcellular distribution of SGK1. This SGK1 Antibody supports immunohistochemical studies of serum and glucocorticoid regulated kinase signaling in breast cancer and investigations of cell survival, proliferation, and stress response pathways.



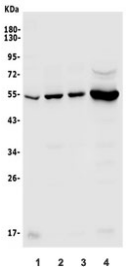
SGK1 Antibody Human Breast Cancer Tissue IHC. FFPE human breast cancer tissue was stained with SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody following heat-induced epitope retrieval by boiling sections in pH8 EDTA buffer for 20 minutes and allowing them to cool before staining. The image demonstrates moderate to strong cytoplasmic staining in malignant epithelial cells with relatively low background staining in adjacent stromal tissue, consistent with the known localization and signaling functions of SGK1. This SGK1 Antibody supports immunohistochemical studies of serum and glucocorticoid regulated kinase signaling in breast cancer and investigations of cell survival, proliferation, and therapeutic resistance.



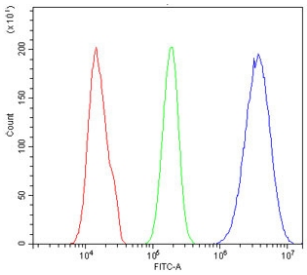
SGK1 Antibody Human Breast Cancer IHC. FFPE human breast cancer tissue was stained with SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody following heat-induced epitope retrieval by boiling sections in pH8 EDTA buffer for 20 minutes and allowing them to cool before staining. The image demonstrates distinct cytoplasmic and membranous staining of malignant epithelial cells with minimal background staining in the surrounding stromal tissue, consistent with the signaling functions of SGK1 in epithelial tumors. This SGK1 Antibody supports immunohistochemical studies of serum and glucocorticoid regulated kinase signaling in breast cancer and investigations of cell survival, proliferation, and stress response pathways.



SGK1 Antibody A549 Cell IF. Immunofluorescent staining of FFPE human A549 cells was performed with SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody (green) and DAPI nuclear stain (blue) following heat-induced epitope retrieval by steaming sections in pH6 citrate buffer for 20 minutes. The image demonstrates predominantly cytoplasmic punctate staining with limited nuclear signal, consistent with the known intracellular localization and signaling functions of SGK1. This SGK1 Antibody supports immunofluorescence studies of serum and glucocorticoid regulated kinase signaling, cellular stress responses, and cancer biology.



SGK1 Antibody Human Placenta and Cancer Cell WB. Western blot analysis of SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody detected a major immunoreactive band between approximately 45 and 60 kDa, consistent with the expected molecular weight range for SGK1. Lanes: (1) human placenta, (2) human A431, (3) human PANC-1, and (4) human Jurkat lysates. SGK1 expression is detected in all samples, with comparatively stronger signal observed in Jurkat cells. This SGK1 Antibody is suitable for western blot studies of serum and glucocorticoid regulated kinase expression in normal tissues and human cancer cell models.



SGK1 Antibody HeLa Cell FACS. Flow cytometry analysis of fixed and permeabilized human HeLa cells was performed using SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody at 1 ug/10^6 cells following blocking with goat sera. Red = cells alone, Green = isotype control, and Blue = SGK1 antibody. The clear rightward shift of the SGK1 antibody population relative to the isotype control demonstrates specific intracellular detection of endogenous SGK1 expression. This SGK1 Antibody supports flow cytometric studies of serum and glucocorticoid regulated kinase expression, cell signaling, and stress response pathways.

Description

SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody is designed for the study of a serine/threonine protein kinase that regulates cellular adaptation to hormonal, metabolic, and environmental stress. Serum and Glucocorticoid Regulated Kinase 1 (SGK1) belongs to the AGC family of protein kinases and is rapidly induced by serum, glucocorticoids, mineralocorticoids, growth factors, insulin, and diverse cellular stress signals. Once activated through

phosphoinositide 3-kinase and mTOR signaling pathways, SGK1 phosphorylates numerous downstream substrates involved in ion transport, cell survival, proliferation, metabolism, and transcriptional regulation.

SGK1 is best known for controlling epithelial sodium transport by regulating the epithelial sodium channel (ENaC), making it an important mediator of renal sodium reabsorption, potassium homeostasis, and blood pressure regulation. The kinase also influences glucose metabolism, cell cycle progression, apoptosis, autophagy, and immune cell function through phosphorylation of proteins including FOXO transcription factors, NDRG1, GSK3, and ion transporters. Because SGK1 integrates hormonal and stress-responsive signaling pathways, it contributes to physiological processes in the kidney, heart, brain, liver, and many other tissues.

Aberrant SGK1 activity has been implicated in numerous diseases including hypertension, chronic kidney disease, diabetes, obesity, fibrosis, inflammatory disorders, and multiple cancers. Elevated SGK1 expression can promote tumor cell survival, proliferation, migration, therapeutic resistance, and epithelial-mesenchymal transition in several malignancies. Consequently, SGK1 has emerged as an attractive therapeutic target, with selective inhibitors being investigated for oncology, cardiovascular disease, metabolic disorders, and immune-mediated diseases. Continued research is expanding understanding of how SGK1 coordinates signaling networks that influence both normal physiology and disease progression.

An SGK1 Antibody is a valuable reagent for detecting endogenous SGK1 expression by western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation, flow cytometry, and related laboratory applications. Because SGK1 regulates hormone-responsive signaling, ion transport, and cell survival pathways, an SGK1 Antibody supports investigations of kinase biology, stress responses, metabolism, cardiovascular physiology, kidney function, and cancer research.

Researchers investigating kinase signaling, tumor progression, therapeutic resistance, and cell survival pathways may also be interested in exploring our Cancer Marker Antibodies page for additional research antibodies.

Application Notes

Optimal dilution of the SGK1 Antibody / Serum and Glucocorticoid Regulated Kinase Antibody should be determined by the researcher.

Immunogen

Amino acids LIAFMKQRRMGLNDFIQKIANNS from the human protein 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, SGK antibody, Serum/Glucocorticoid Regulated Kinase 1 antibody