

Datasheet for 200-401-844**SKG-1 Antibody****Overview**

Description:	Anti-Human SGK-1 (RABBIT) - 200-401-844
Item No.:	200-401-844
Size:	500 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details**Background:**

SGK-1 (also called Serine/threonine-protein kinase Sgk1 and Serum/glucocorticoid-regulated kinase 1) is a protein kinase that plays an important role in cellular stress response. SGK1 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. This kinase mediates cell survival signals, phosphorylates and negatively regulates pro-apoptotic FOXO3A and phosphorylates NEDD4L, which leads to its inactivation and to the subsequent activation of various channels and transporters such as ENaC, Kv1.3, or EAAT1. SGK1 is localized to the cytoplasm and upon phosphorylation is translocated to the nucleus. The kinase is expressed in most tissues with highest levels in the pancreas, followed by placenta, kidney and lung. Induction occurs upon exposure to glucocorticoids and by excessive extracellular glucose or TGF-beta, in cultured cells. SGK-1 is 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. The kinase is ubiquitinated by NEDD4L; which promotes proteasomal degradation.

Synonyms:	rabbit anti-SKG-1 Antibody, Serum/glucocorticoid-regulated kinase 1, SGK 1 antibody, SGK1 antibody, Cellular stress response antibodies, Serine/threonine-protein kinase Sgk1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	SGK1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	SGK-1 Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region near amino acids 400-431 of human SGK-1.
Purity/Specificity:	Anti-SKG-1 Antibody is directed against human SGK-1 protein. The product was protein A purified from monospecific antiserum. A BLAST analysis was used to suggest reactivity with this protein from human, macaque and chimpanzee sources based on 100% homology for the immunogen sequence. This antibody is expected to cross react with SGK-1 homologues from mouse, rat, dog, chicken, bovine, rabbit and spiny dogfish based on an 92% sequence homology for the immunogen (12/13) from these sources. Cross reactivity with SGK-1 homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - O00141 • NCBI - O00141.2 • GeneID - 6446

Application Details

Tested Applications:	ELISA, IHC, WB
Application Note:	SKG-1 Antibody has been tested for use in ELISA, immunohistochemistry and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~49 kDa in size corresponding to SGK-1 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:4,000 - 1:16,000
IHC:	10 µg/ml to 20 µg/ml
WB:	1:500 - 1:3,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	5.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer: None

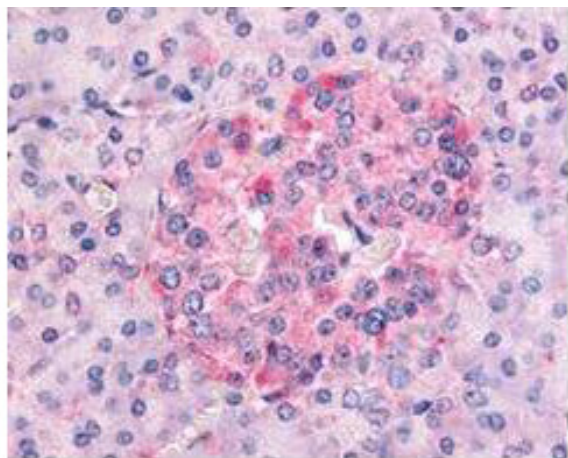
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store SGK-1 Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Rockland's Affinity Purified anti-SGK-1 antibody was used at a 15 µg/ml to detect nuclear and cytoplasmic signal in a variety of tissues including adrenal, heart, liver, ovary, pancreas, placenta, skin, spleen, testes, thyroid and uterus. Low to moderate levels of background staining were noted. This image shows SGK-1 staining of human pancreas. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Tina Roush, LifeSpanBiosciences, Seattle, WA.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.