

# Mouse Sgk3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14298b

### Specification

# Mouse Sgk3 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9ERE3</u> <u>O8R4V0</u>, <u>NP\_808215.2</u>, <u>NP\_573483.1</u> Human, Mouse Rat Rabbit Polyclonal Rabbit IgG 57145 381-409

## Mouse Sgk3 Antibody (C-term) - Additional Information

#### Gene ID 170755

**Other Names** Serine/threonine-protein kinase Sgk3, Cytokine-independent survival kinase, Serum/glucocorticoid-regulated kinase 3, Serum/glucocorticoid-regulated kinase-like, Sgk3, Cisk, Sgkl

#### Target/Specificity

This Mouse Sgk3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 381-409 amino acids from the C-terminal region of mouse Sgk3.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Mouse Sgk3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Sgk3 Antibody (C-term) - Protein Information

Name Sgk3



# Synonyms Cisk, Sgkl

**Function** Serine/threonine-protein kinase which is involved in the regulation of a wide variety of ion channels, membrane transporters, cell growth, proliferation, survival and migration. Up-regulates Na(+) channels: SCNN1A/ENAC and SCN5A, K(+) channels: KCNA3/KV1.3, KCNE1, KCNQ1 and KCNH2/HERG, epithelial Ca(2+) channels: TRPV5 and TRPV6, chloride channel: BSND, creatine transporter: SLC6A8, Na(+)/dicarboxylate cotransporter: SLC13A2/NADC1, Na(+)-dependent phosphate cotransporter: SLC34A2/NAPI-2B, amino acid transporters: SLC1A5/ASCT2 and SLC6A19, glutamate transporters: SLC1A3/EAAT1, SLC1A6/EAAT4 and SLC1A7/EAAT5, glutamate receptors: GRIA1/GLUR1 and GRIK2/GLUR6, Na(+)/H(+) exchanger: SLC9A3/NHE3, and the Na(+)/K(+) ATPase. Plays a role in the regulation of renal tubular phosphate transport and bone density. Phosphorylates NEDD4L and GSK3B. Positively regulates ER transcription activity through phosphorylation of FLII. Negatively regulates the function of ITCH/AIP4 via its phosphorylation and thereby prevents CXCR4 from being efficiently sorted to lysosomes.

# **Cellular Location**

Cytoplasmic vesicle. Early endosome. Recycling endosome Note=Endosomal localization is a prerequisite for complete kinase activity. It is essential for its colocalization with the kinase responsible for phosphorylating Ser-486 thus allowing PDPK1 phosphorylation of Thr-320 resulting in complete activation of SGK3 Colocalizes with SLC9A3/NHE3 in the recycling endosomes (By similarity). Localized in vesicle-like structures and in the early endosome.

## **Tissue Location**

Widely expressed, predominantly in the heart, spleen and 7-day embryo

# Mouse Sgk3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

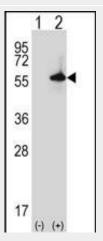
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Mouse Sgk3 Antibody (C-term) - Images

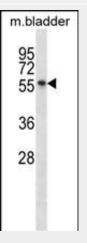
ZR-75-1	
95 72	
55	•
36	-
28	
17	



Mouse Sgk3 Antibody (C-term) (Cat. #AP14298b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the Sgk3 antibody detected the Sgk3 protein (arrow).



Western blot analysis of Sgk3 (arrow) using rabbit polyclonal Mouse Sgk3 Antibody (C-term) (Cat. #AP14298b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the Sgk3 gene.



Mouse Sgk3 Antibody (C-term) (Cat. #AP14298b) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the Sgk3 antibody detected the Sgk3 protein (arrow).

# Mouse Sgk3 Antibody (C-term) - Background

Sgk3 is involved in the activation of potassium channels (By similarity). Mediates cell IL-3-dependent survival signals. Can inhibit pro-apoptotic FOXO3A in vitro.

# Mouse Sgk3 Antibody (C-term) - References

Zemtsova, I.M., et al. Am. J. Physiol., Cell Physiol. 299 (5), C1007-C1014 (2010) : Mauro, T.M., et al. FASEB J. 23(9):3193-3202(2009) Xu, J., et al. J. Biol. Chem. 284(21):14377-14385(2009) Campagna, D.R., et al. J. Invest. Dermatol. 128(3):730-732(2008) Okada, T., et al. Am. J. Pathol. 168(4):1119-1133(2006)