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SGK Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant SGK.
Catalog # AT3854a

Product Information

Application	WB, IHC, IF, E
Primary Accession	O00141
Other Accession	BC001263
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	4D7-G3
Calculated MW	48942

Additional Information

Gene ID	6446
Other Names	Serine/threonine-protein kinase Sgk1, Serum/glucocorticoid-regulated kinase 1, SGK1, SGK
Target/Specificity	SGK (AAH01263.1, 1 a.a. ~ 431 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	SGK Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

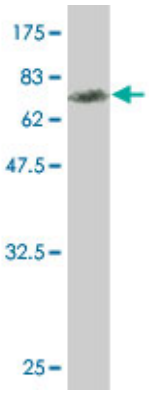
This gene encodes a serine/threonine protein kinase that plays an important role in cellular stress response. This kinase activates certain potassium, sodium, and chloride channels, suggesting an involvement in the regulation of processes such as cell survival, neuronal excitability, and renal sodium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

References

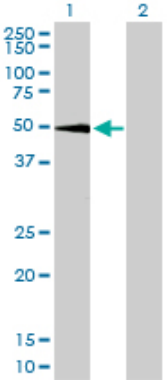
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes

REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Serum and glucocorticoid-induced kinase (SGK) 1 and the epithelial sodium channel are regulated by multiple with no lysine (WNK) family members. Heise CJ, et al. J Biol Chem, 2010 Aug 13. PMID 20525693.Phosphopeptide screen uncovers novel phosphorylation sites of Nedd4-2 that potentiate its inhibition of the epithelial Na+ channel. Hallows KR, et al. J Biol Chem, 2010 Jul 9. PMID 20466724.Phospholipase D stabilizes HDM2 through an mTORC2/SGK1 pathway. Lyo D, et al. Biochem Biophys Res Commun, 2010 May 28. PMID 20438709.mTOR complex-2 activates ENaC by phosphorylating SGK1. Lu M, et al. J Am Soc Nephrol, 2010 May. PMID 20338997.

Images

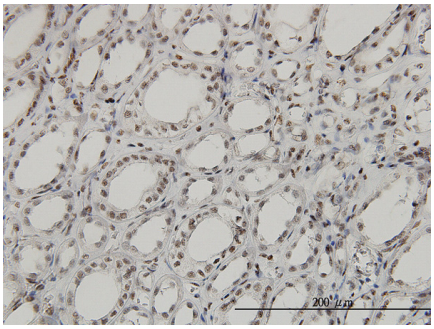


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (73.04 KDa) .

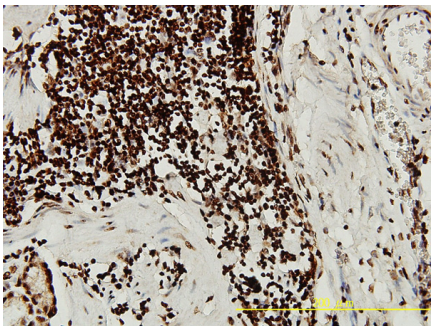


Western Blot analysis of SGK expression in transfected 293T cell line by SGK monoclonal antibody (M01), clone 4D7-G3.

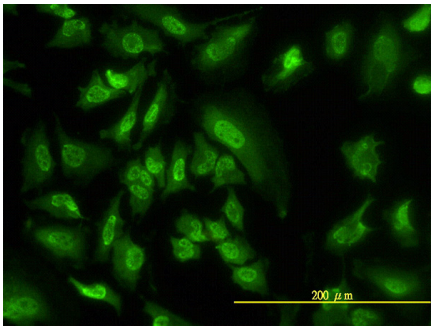
Lane 1: SGK transfected lysate(48.9 KDa).
Lane 2: Non-transfected lysate.



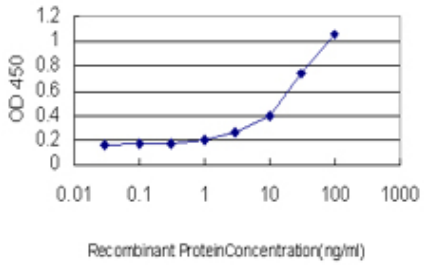
Immunoperoxidase of monoclonal antibody to SGK on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]



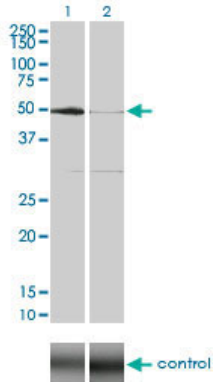
Immunoperoxidase of monoclonal antibody to SGK on formalin-fixed paraffin-embedded human stomach tissue. [antibody concentration 5 ug/ml]



Immunofluorescence of monoclonal antibody to SGK on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged SGK is approximately 1ng/ml as a capture antibody.



Western blot analysis of SGK over-expressed 293 cell line, cotransfected with SGK Validated Chimera RNAi ((Cat # AT3854a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.