

# Immunotag™ SGK1 (phospho Ser78) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0333
Product Description	Immunotag™ SGK1 (phospho Ser78) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SGK1 (Ser78)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human SGK1 (phospho Ser78)
Specificity	Phospho-SGK1 (S78) Polyclonal Antibody detects endogenous levels of SGK1 protein only when phosphorylated at S78.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	SGK1
Accession No.	O00141 Q9WVC6 Q06226
Alternate Names	SGK1; SGK; Serine/threonine-protein kinase Sgk1; Serum/glucocorticoid-regulated kinase 1

## Antibody Specification

Description	serum/glucocorticoid regulated kinase 1(SGK1) Homo sapiens 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. [provided by RefSeq, Jan 2009],
Cell Pathway/ Category	Aldosterone-regulated sodium reabsorption,
Protein Expression	Brain,Cervix,Hair follicle dermal papilla,Retina,
Subcellular Localization	nucleus,nucleoplasm,cytoplasm,mitochondrion,endoplasmic reticulum membrane,cytosol,plasma membrane,
Protein Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Two specific sites, one in the kinase domain (Thr-256) and the other in the C-terminal regulatory region (Ser-422), need to be phosphorylated for its full activation.,function:Protein kinase that plays an important role in cellular stress response. 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. Mediates cell survival signals, phosphorylates and negatively regulates pro-apoptotic FOXO3A. Phosphorylates NEDD4L, which leads to its inactivation and to the subsequent activation of various channels and transporters such as ENaC, Kv1.3, or EAAT1.,induction:By serum and/or glucocorticoids. By excessive extracellular glucose and by TGF-beta, in cultured cells.,PTM: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.,PTM:Ubiquitinated by NEDD4L; which promotes proteasomal degradation. Ubiquitinated by SYVN1 at the endoplasmic reticulum; which promotes rapid proteasomal degradation and maintains a high turnover rate in resting cells.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Nuclear, upon phosphorylation.,subunit:Interacts with NEDD4 and NEDD4L.,tissue specificity:Expressed in most tissues with highest levels in the pancreas, followed by placenta, kidney and lung.,
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