Datasheet for ABIN7169176

anti-SGK1 antibody (AA 247-406)

4 Images

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Overview

Quantity:	100 µg
Target:	SGK1
Binding Specificity:	AA 247-406
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SGK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Serine/threonine-protein kinase Sgk1 protein (247-406AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified

Target Details

Target:	SGK1
Alternative Name:	SGK1 (SGK1 Products)
Background:	Background: Serine/threonine-protein kinase which is involved in the regulation of a wide variety of ion channels, membrane transporters, cellular enzymes, transcription factors, neuronal

excitability, cell growth, proliferation, survival, migration and apoptosis. Plays an important role in cellular stress response. Contributes to regulation of renal Na+ retention, renal K+ elimination, salt appetite, gastric acid secretion, intestinal Na+/H+ exchange and nutrient transport, insulin-dependent salt sensitivity of blood pressure, salt sensitivity of peripheral glucose uptake, cardiac repolarization and memory consolidation. Up-regulates Na+ channels: SCNN1A/ENAC, SCN5A and ASIC1/ACCN2, K+ channels: KCNJ1/ROMK1, KCNA1-5, KCNQ1-5 and KCNE1, epithelial Ca2+ channels: TRPV5 and TRPV6, chloride channels: BSND, CLCN2 and CFTR, glutamate transporters: SLC1A3/EAAT1, SLC1A2 /EAAT2, SLC1A1/EAAT3, SLC1A6/EAAT4 and SLC1A7/EAAT5, amino acid transporters: SLC1A5/ASCT2, SLC38A1/SN1 and SLC6A19, creatine transporter: SLC6A8, Na+/dicarboxylate cotransporter: SLC13A2/NADC1, Na+-dependent phosphate cotransporter: SLC34A2/NAPI-2B, glutamate receptor: GRIK2/GLUR6. Up-regulates carriers: SLC9A3/NHE3, SLC12A1/NKCC2, SLC12A3/NCC, SLC5A3/SMIT, SLC2A1/GLUT1, SLC5A1/SGLT1 and SLC15A2/PEPT2. Regulates enzymes: GSK3A/B, PMM2 and Na+/K+ ATPase, and transcription factors: CTNNB1 and nuclear factor NF-kappa-B. Stimulates sodium transport into epithelial cells by enhancing the stability and expression of SCNN1A/ENAC. This is achieved by phosphorylating the NEDD4L ubiquitin E3 ligase, promoting its interaction with 14-3-3 proteins, thereby preventing it from binding to SCNN1A/ENAC and targeting it for degradation. Regulates store-operated Ca(+2) entry (SOCE) by stimulating ORAI1 and STIM1. Regulates KCNJ1/ROMK1 directly via its phosphorylation or indirectly via increased interaction with SLC9A3R2/NHERF2. Phosphorylates MDM2 and activates MDM2-dependent ubiquitination of p53/TP53. Phosphorylates MAPT/TAU and mediates microtubule depolymerization and neurite formation in hippocampal neurons. Phosphorylates SLC2A4/GLUT4 and up-regulates its activity. Phosphorylates APBB1/FE65 and promotes its localization to the nucleus. Phosphorylates MAPK1/ERK2 and activates it by enhancing its interaction with MAP2K1/MEK1 and MAP2K2/MEK2. Phosphorylates FBXW7 and plays an inhibitory role in the NOTCH1 signaling. Phosphorylates FOXO1 resulting in its relocalization from the nucleus to the cytoplasm. Phosphorylates FOXO3, promoting its exit from the nucleus and interference with FOXO3-dependent transcription. Phosphorylates BRAF and MAP3K3/MEKK3 and inhibits their activity. Phosphorylates SLC9A3/NHE3 in response to dexamethasone, resulting in its activation and increased localization at the cell membrane. Phosphorylates CREB1. Necessary for vascular remodeling during angiogenesis. Sustained high levels and activity may contribute to conditions such as hypertension and diabetic nephropathy. Isoform 2 exhibited a greater effect on cell plasma membrane expression of SCNN1A/ENAC and Na+ transport than isoform 1.
Aliases: OTTHUMP00000017247 antibody, Serine/threonine protein kinase SGK antibody, Serine/threonine protein kinase Sgk1 antibody, Serine/threonine-protein kinase Sgk1 antibody,

Target Details

	Serum and glucocorticoid regulated kinase antibody, Serum/glucocorticoid regulated kinase 1 antibody, Serum/glucocorticoid regulated kinase antibody, Serum/glucocorticoid-regulated kinase 1 antibody, SGK 1 antibody, SGK antibody, SGK1 antibody, Sgk1 variant i3 antibody, SGK1_HUMAN antibody
UniProt:	O00141
Pathways:	MAPK Signaling, Notch Signaling, Steroid Hormone Mediated Signaling Pathway

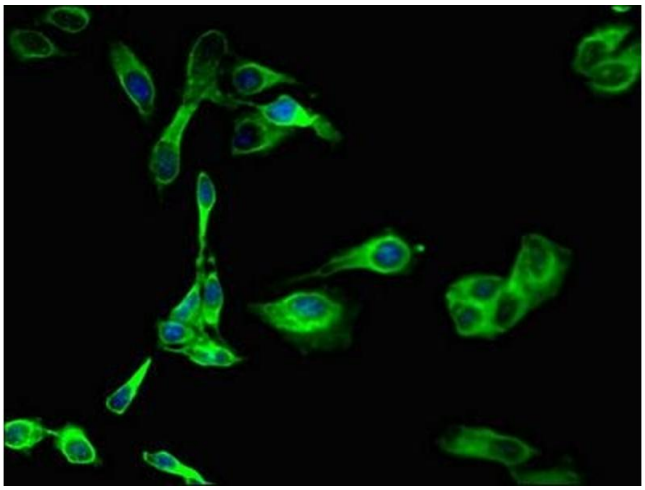
Application Details

Application Notes:	Recommended dilution: WB:1:2000-1:10000, IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

Handling

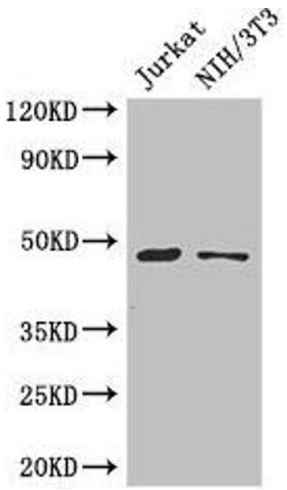
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



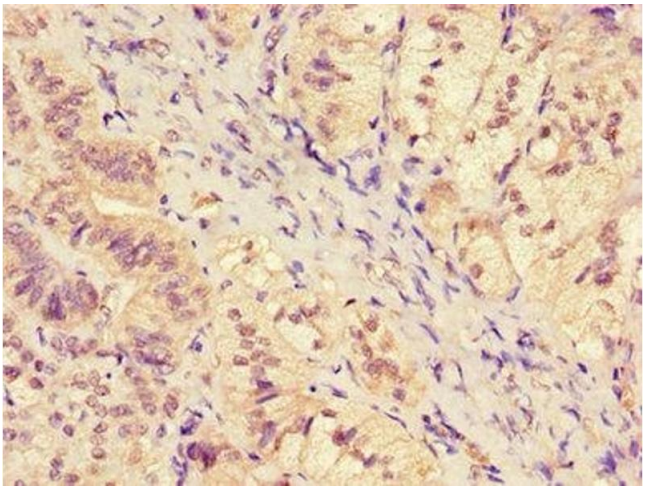
Immunofluorescence

Image 1. Immunofluorescent analysis of Hela cells using ABIN7169176 at dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)



Western Blotting

Image 2. Western Blot Positive WB detected in: Jurkat whole cell lysate, NIH/3T3 whole cell lysate All lanes: SGK1 antibody at 3 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 49, 60, 51, 48, 53 kDa Observed band size: 49 kDa



Immunohistochemistry

Image 3. Immunohistochemistry of paraffin-embedded human adrenal gland tissue using ABIN7169176 at dilution of 1:100

Please check the product details page for more images. Overall 4 images are available for ABIN7169176.