Data Sheet (Cat.No.TMAC-03727)

Anti-SGK1 Antibody (8M491)

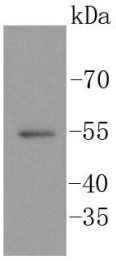
Product Details

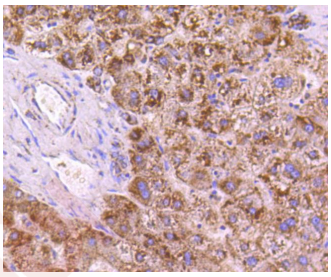
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 55 kDa.
Clone:	8M491
Purification:	ProA affinity purified

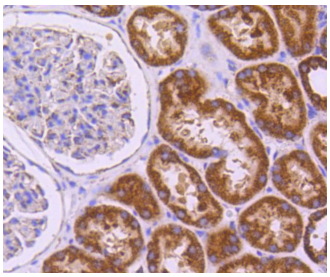
Applications

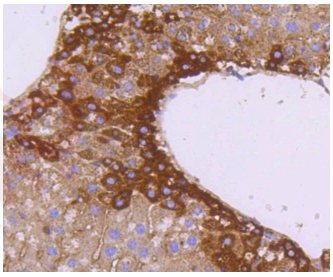
Verified Activity:

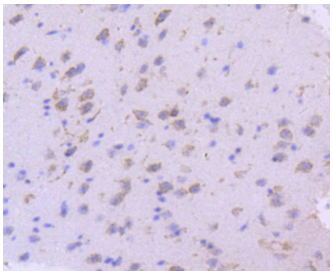
1. Western blot analysis of SGK1 on human kidney lysates using anti-SGK1 antibody at 1/1,000 dilution.
2. Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-SGK1 antibody. Counter stained with hematoxylin.
3. Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-SGK1 antibody. Counter stained with hematoxylin.
4. Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-SGK1 antibody. Counter stained with hematoxylin.
5. Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-SGK1 antibody. Counter stained with hematoxylin.
6. Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-SGK1 antibody. Counter stained with hematoxylin.
7. Flow cytometric analysis of 293 cells with SGK1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

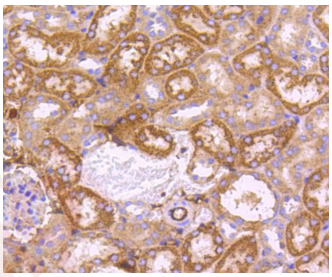


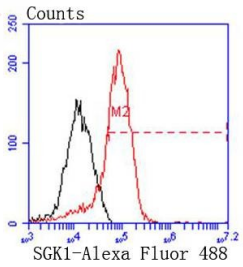












Application: FCM,IHC,IP,WB

Recommended: WB: 1:1000; IHC: 1:50-200; FCM: 1:50-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein
Uniprot ID:	O00141
Synonyms:	Serum/glucocorticoid regulated kinase 1;Sgk1 variant i3;Serum and glucocorticoid regulated kinase;SGK 1;Serum/glucocorticoid-regulated kinase 1;SGK1_HUMAN;Serine/threonine-protein kinase Sgk1;Serine/threonine protein kinase Sgk1;SGK;OTTHUMP00000017247; Serine/threonine protein kinase SGK;Serum/glucocorticoid regulated kinase

Research Background

Serum- and glucocorticoid-regulated kinase (SGK), also known as SGK1, is a serine/threonine protein kinase and a member of the "AGC" subfamily, which includes protein kinases A, G, and C. SGK plays an important role in activating certain potassium, sodium, and chloride channels, suggesting an involvement in the regulation of processes such as cell survival, neuronal excitability, and renal sodium excretion. SGK contains a catalytic domain, which is most similar to Akt1 (also known as protein kinase B or PKB). SGK is a downstream target of PI 3-kinase-stimulated growth factor signaling, with 3-phosphoinositide-dependent protein kinase 1 (PDK1) capable of phosphorylating the activation-loop of SGK at Threonine-256. The adrenal corticosteroid hormone, Aldosterone, induces the transcription of SGK, which mediates Na + transport by stimulating epithelial sodium channel activity. The SGK promoter contains a glucocorticoid response element and an SP-1 regulatory element, and is a transcriptional target for p53. SGK is also a component of the p38 MAPK-mediated response to hyperosmotic stress. The human SGK gene maps to chromosome 6q23 and encodes the 431-amino acid SGK protein.