

Datasheet for ABIN7169181
anti-SIK1 antibody (AA 492-750)[Go to Product page](#)

3 Images

Overview

Quantity:	100 µg
Target:	SIK1
Binding Specificity:	AA 492-750
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SIK1 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Serine/threonine-protein kinase SIK1 protein (492-750AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	SIK1
Alternative Name:	SIK1 (SIK1 Products)
Background:	Background: Serine/threonine-protein kinase involved in various processes such as cell cycle regulation, gluconeogenesis and lipogenesis regulation, muscle growth and differentiation and

Target Details

tumor suppression. Phosphorylates HDAC4, HDAC5, PPME1, SREBF1, CRTC1/TORC1 and CRTC2/TORC2. Acts as a tumor suppressor and plays a key role in p53/TP53-dependent anoikis, a type of apoptosis triggered by cell detachment: required for phosphorylation of p53/TP53 in response to loss of adhesion and is able to suppress metastasis. Part of a sodium-sensing signaling network, probably by mediating phosphorylation of PPME1: following increases in intracellular sodium, SIK1 is activated by CaMK1 and phosphorylates PPME1 subunit of protein phosphatase 2A (PP2A), leading to dephosphorylation of sodium/potassium-transporting ATPase ATP1A1 and subsequent increase activity of ATP1A1. Acts as a regulator of muscle cells by phosphorylating and inhibiting class II histone deacetylases HDAC4 and HDAC5, leading to promote expression of MEF2 target genes in myocytes. Also required during cardiomyogenesis by regulating the exit of cardiomyoblasts from the cell cycle via down-regulation of CDKN1C/p57Kip2. Acts as a regulator of hepatic gluconeogenesis by phosphorylating and repressing the CREB-specific coactivators CRTC1/TORC1 and CRTC2/TORC2, leading to inhibit CREB activity. Also regulates hepatic lipogenesis by phosphorylating and inhibiting SREBF1. In concert with CRTC1/TORC1, regulates the light-induced entrainment of the circadian clock by attenuating PER1 induction, represses CREB-mediated transcription of PER1 by phosphorylating and deactivating CRTC1/TORC1 (By similarity).

Aliases: KID2 antibody, MSK antibody, myocardial SNF1 like kinase antibody, QIK antibody, Qin-induced kinase antibody, Salt inducible kinase 1 antibody, Salt-inducible protein kinase 1 antibody, Serine threonine protein kinase SNF1 like kinase 1 antibody, Serine threonine protein kinase SNF1LK antibody, Serine/threonine-protein kinase SIK1 antibody, Serine/threonine-protein kinase SNF1-like kinase 1 antibody, Serine/threonine-protein kinase SNF1LK antibody, SIK-1 antibody, SIK1 antibody, SIK1_HUMAN antibody, SNF1 like kinase antibody, Snf1lk antibody

UniProt: [P57059](#)

Pathways: [Regulation of Muscle Cell Differentiation](#), [Skeletal Muscle Fiber Development](#), [Regulation of Carbohydrate Metabolic Process](#)

Application Details

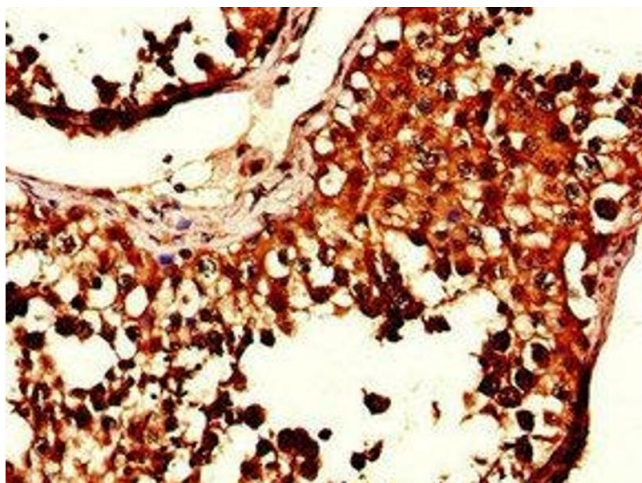
Application Notes: Recommended dilution: IHC:1:20-1:200, IF:1:50-1:200,

Restrictions: For Research Use only

Handling

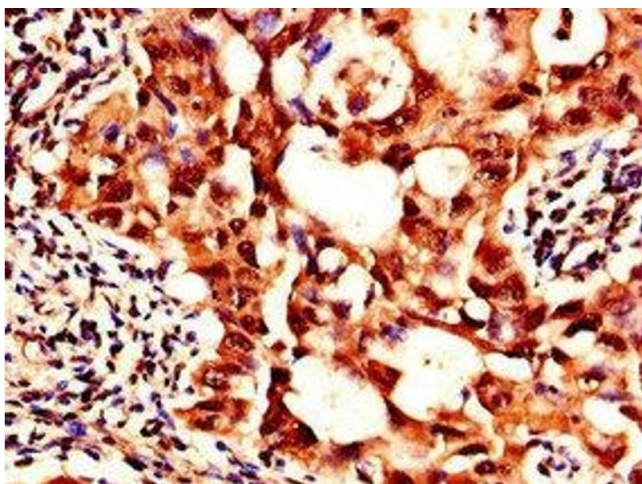
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon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

Images



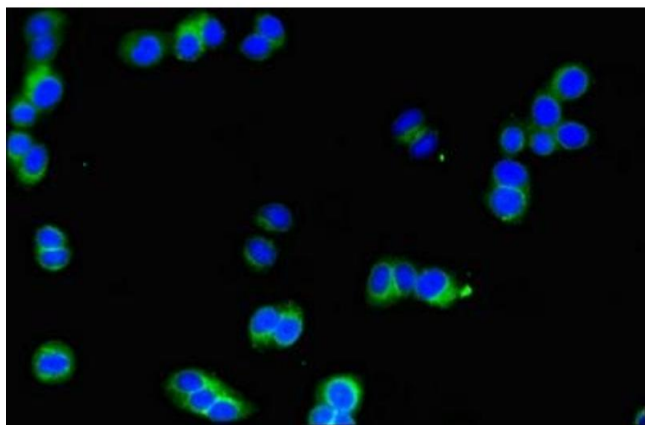
Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human testis tissue using ABIN7169181 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human lung cancer using ABIN7169181 at dilution of 1:100



Immunofluorescence

Image 3. Immunofluorescent analysis of HepG2 cells using ABIN7169181 at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)