

Datasheet for ABIN7140126  
**anti-STK4 antibody (AA 6-24)**



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2 Images

## Overview

Quantity:	100 µL
Target:	STK4
Binding Specificity:	AA 6-24
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This STK4 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

## Product Details

Immunogen:	Peptide sequence from Human Serine/threonine-protein kinase 4 protein (6-24AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

## Target Details

Target:	STK4
Alternative Name:	STK4 ( <a href="#">STK4 Products</a> )
Background:	Background: Stress-activated, pro-apoptotic kinase which, following caspase-cleavage, enters the nucleus and induces chromatin condensation followed by internucleosomal DNA

## Target Details

fragmentation. Key component of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. The core of this pathway is composed of a kinase cascade wherein STK3/MST2 and STK4/MST1, in complex with its regulatory protein SAV1, phosphorylates and activates LATS1/2 in complex with its regulatory protein MOB1, which in turn phosphorylates and inactivates YAP1 oncoprotein and WWTR1/TAZ. Phosphorylation of YAP1 by LATS2 inhibits its translocation into the nucleus to regulate cellular genes important for cell proliferation, cell death, and cell migration. STK3/MST2 and STK4/MST1 are required to repress proliferation of mature hepatocytes, to prevent activation of facultative adult liver stem cells (oval cells), and to inhibit tumor formation (By similarity). Phosphorylates 'Ser-14' of histone H2B (H2BS14ph) during apoptosis. Phosphorylates FOXO3 upon oxidative stress, which results in its nuclear translocation and cell death initiation. Phosphorylates MOBKL1A, MOBKL1B and RASSF2. Phosphorylates TNNT3 (cardiac Tn-I) and alters its binding affinity to TNNT1 (cardiac Tn-C) and TNNT2 (cardiac Tn-T). Phosphorylates FOXO1 on 'Ser-212' and regulates its activation and stimulates transcription of PMAIP1 in a FOXO1-dependent manner. Phosphorylates SIRT1 and inhibits SIRT1-mediated p53/TP53 deacetylation, thereby promoting p53/TP53 dependent transcription and apoptosis upon DNA damage. Acts as an inhibitor of PKB/AKT1. Phosphorylates AR on 'Ser-650' and suppresses its activity by intersecting with PKB/AKT1 signaling and antagonizing formation of AR-chromatin complexes.

Aliases: Kinase responsive to stress antibody, Krs2 antibody, Mammalian STE20 like protein kinase 1 antibody, Mammalian STE20-like protein kinase 1 antibody, Mammalian sterile 20 like 1 antibody, MST-1 antibody, MST1 antibody, Serine/threonine kinase 4 antibody, Serine/threonine protein kinase Krs 2 antibody, Serine/threonine-protein kinase 4 antibody, Serine/threonine-protein kinase Krs-2 antibody, STE20 like kinase MST1 antibody, STE20-like kinase MST1 antibody, STK4 antibody, STK4\_HUMAN antibody, TIIAC antibody, YSK3 antibody

UniProt: [Q13043](#)

Pathways: [Tube Formation](#)

## Application Details

Application Notes: Recommended dilution: IHC:1:500-1:1000, IF:1:50-1:200,

Restrictions: For Research Use only

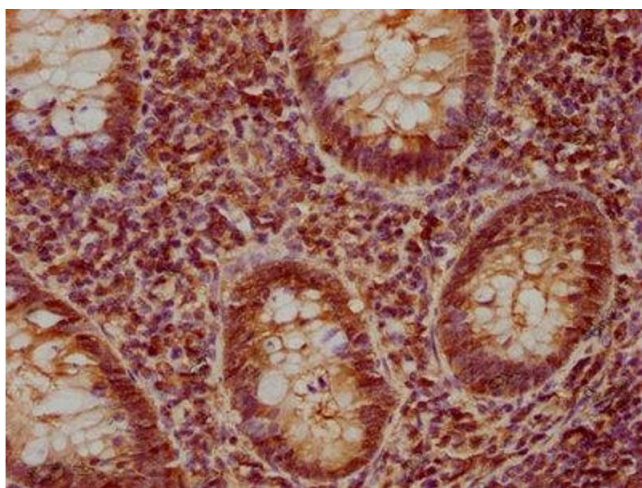
## Handling

Format: Liquid

## Handling

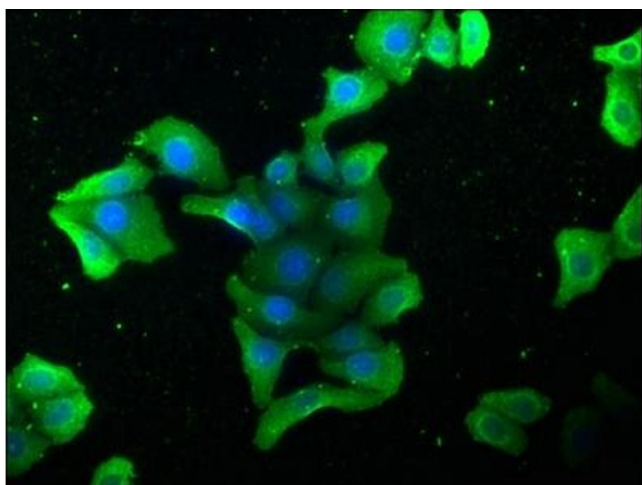
Buffer:	Preservative: 0.03 % Proclin 300
	Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store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

## Images



### Immunohistochemistry

**Image 1.** IHC image of ABIN7140126 diluted at 1:840 and staining in paraffin-embedded human appendix tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



### Immunofluorescence

**Image 2.** Immunofluorescence staining of HepG2 cells with ABIN7140126 at 1:168, counter-stained with DAPI. The cells were fixed in 4 % formaldehyde, permeabilized using 0.2 % Triton X-100 and blocked in 10 % normal Goat Serum. The cells were then incubated with the antibody overnight at 4 °C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).