

## STK38 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7074b

## **Specification**

# STK38 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q15208
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 410-439

# STK38 Antibody (C-term) - Additional Information

### **Gene ID** 11329

#### **Other Names**

Serine/threonine-protein kinase 38, NDR1 protein kinase, Nuclear Dbf2-related kinase 1, STK38 {ECO:0000312|EMBL:AAH120851}

# **Target/Specificity**

This STK38 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 410-439 amino acids from the C-terminal region of human STK38.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

STK38 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# STK38 Antibody (C-term) - Protein Information

Name STK38 {ECO:0000303|PubMed:17906693, ECO:0000312|HGNC:HGNC:17847}

**Function** Serine/threonine-protein kinase that acts as a negative regulator of MAP3K1/2 signaling (PubMed: 12493777, PubMed: 15197186, PubMed: 17906693, PubMed: 7761441). Converts MAP3K2





from its phosphorylated form to its non-phosphorylated form and inhibits autophosphorylation of MAP3K2 (PubMed:12493777, PubMed:15197186, PubMed:17906693, PubMed:7761441). Acts as an ufmylation 'reader' in a kinase-independent manner: specifically recognizes and binds monoufmylated histone H4 in response to DNA damage, promoting the recruitment of SUV39H1 to the double-strand breaks, resulting in ATM activation (PubMed:32537488).

#### **Cellular Location**

Nucleus. Cytoplasm. Chromosome Note=Localizes to DNA double-strand breaks in response to DNA damage

### **Tissue Location**

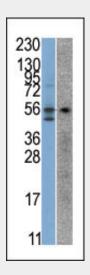
Ubiquitously expressed with highest levels observed in peripheral blood leukocytes.

## STK38 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

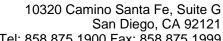
## STK38 Antibody (C-term) - Images



The anti-STK38 Pab (Cat. #AP7074b) is used in Western blot to detect STK38 in SK-Br-3 (left) and Jurkat (right) cell line lysates.

## STK38 Antibody (C-term) - Background

Stk38,also known as NUCLEAR DBF2-RELATED PROTEIN, contains 1 protein kinase domain that interacts with mob1 and mob2. The homodimeric s100b binds to two molecules of stk38. It is ubiquitously expressed with highest levels observed in peripheral blood leukocytes. Stk38 activated by binding of s100b which releases autoinhibitory n-lobe interactions, enabling atp to bind and the autophosphorylation of ser-281. thr-444 then undergoes calcium- dependent phosphorylation by an upstream kinase. Interactions between phosphorylated thr-444 and the n-lobe promote additional





Tel: 858.875.1900 Fax: 858.875.1999

structural changes that complete the activation of the kinase. Autoinhibition is also released by the binding of mob1/mobkl1a and mob2/hcca2 to the n-terminal of stk38.

# STK38 Antibody (C-term) - References

Devroe, E., et al., J. Biol. Chem. 279(23):24444-24451 (2004). Tamaskovic, R., et al., J. Biol. Chem. 278(9):6710-6718 (2003). Tripodis, N., et al., Genome Res. 8(6):631-643 (1998). Millward, T., et al., Proc. Natl. Acad. Sci. U.S.A. 92(11):5022-5026 (1995).