


## Product datasheet

### Anti-CSNK2A2 antibody ab10474

★★★★★ [6 Abreviews](#) [5 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-CSNK2A2 antibody
<b>Description</b>	Rabbit polyclonal to CSNK2A2
<b>Host species</b>	Rabbit
<b>Specificity</b>	Reacts with the alpha prime subunit.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rabbit, Cow, Dog, Pig, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Bat, Elephant 
<b>Immunogen</b>	Synthetic peptide corresponding to Human CSNK2A2 aa 300 to the C-terminus. Database link: <a href="#">1459</a>
<b>Positive control</b>	WB: HeLa, HEK293T, Jurkat, TCMK-1 and NIH/3T3 whole cell lysates. IP: HeLa whole cell lysate.
<b>General notes</b>	<p>CKII is a serine/threonine protein kinase that phosphorylates acidic proteins such as casein. The kinase exists as a tetramer and is composed of an alpha, an alpha-prime, and two beta subunits. The alpha subunits contain the catalytic activity while the beta subunits undergo autophosphorylation. The gene for this protein is found on chromosome 20, but a related transcribed pseudogene is found on chromosome 11. Three transcript variants have been found, encoding two different isoforms. Protein kinase CKII is recognized as one of the key cellular signals for cell growth and proliferation; it also has an important role in apoptosis.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7

	Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	Antibodies were affinity purified using the peptide immobilized on solid support.
<b>Primary antibody notes</b>	CKII is a serine/threonine protein kinase that phosphorylates acidic proteins such as casein. The kinase exists as a tetramer and is composed of an alpha, an alpha-prime, and two beta subunits. The alpha subunits contain the catalytic activity while the beta subunits undergo autophosphorylation. The gene for this protein is found on chromosome 20, but a related transcribed pseudogene is found on chromosome 11. Three transcript variants have been found, encoding two different isoforms. Protein kinase CKII is recognized as one of the key cellular signals for cell growth and proliferation; it also has an important role in apoptosis.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab10474 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (4)	1/1000 - 1/5000. Detects a band of approximately 39 kDa (predicted molecular weight: 41 kDa).
IP	★★★★★ (1)	Use at 2-10 µg/mg of lysate.

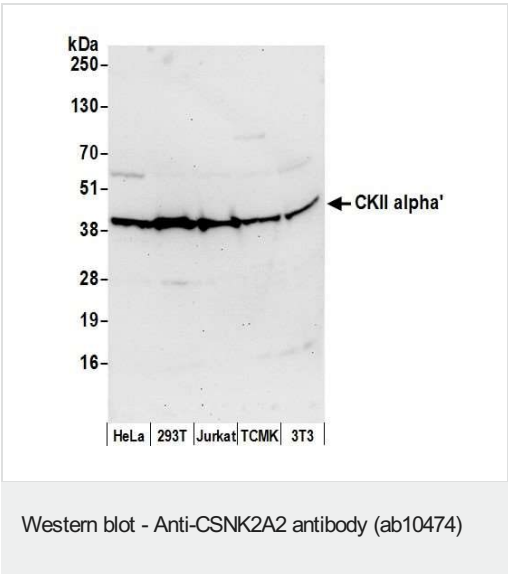
## Target

**Function** Catalytic subunit of a constitutively active serine/threonine-protein kinase complex that phosphorylates a large number of substrates containing acidic residues C-terminal to the phosphorylated serine or threonine. Regulates numerous cellular processes, such as cell cycle progression, apoptosis and transcription, as well as viral infection. May act as a regulatory node which integrates and coordinates numerous signals leading to an appropriate cellular response. During mitosis, functions as a component of the p53/TP53-dependent spindle assembly checkpoint (SAC) that maintains cyclin-B-CDK1 activity and G2 arrest in response to spindle damage. Also required for p53/TP53-mediated apoptosis, phosphorylating 'Ser-392' of p53/TP53 following UV irradiation. Can also negatively regulate apoptosis. Phosphorylates the caspases CASP9 and CASP2 and the apoptotic regulator NOL3. Phosphorylation protects CASP9 from cleavage and activation by CASP8, and inhibits the dimerization of CASP2 and activation of CASP8. Regulates transcription by direct phosphorylation of RNA polymerases I, II, III and IV. Also phosphorylates and regulates numerous transcription factors including NF-kappa-B, STAT1, CREB1, IRF1, IRF2, ATF1, SRF, MAX, JUN, FOS, MYC and MYB. Phosphorylates Hsp90 and its co-chaperones FKBP4 and CDC37, which is essential for chaperone function. Regulates Wnt signaling by phosphorylating CTNNB1 and the transcription factor LEF1. Acts as an ectokinase that phosphorylates several extracellular proteins. During viral infection, phosphorylates various proteins involved in the viral life cycles of EBV, HSV, HBV, HCV, HIV, CMV and HPV.

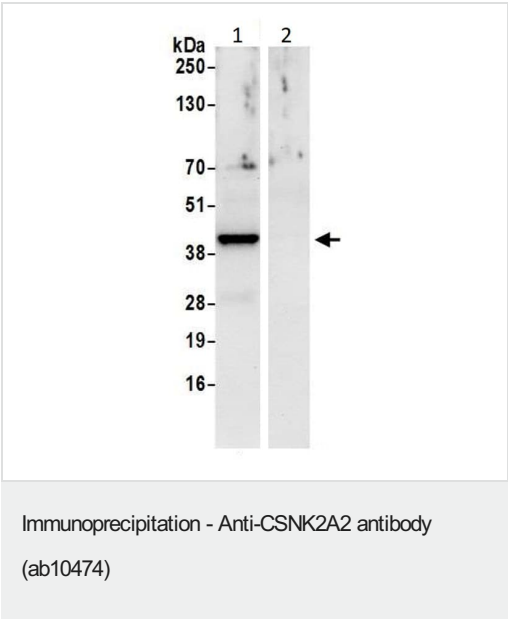
Sequence similarities

Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. CK2 subfamily.  
Contains 1 protein kinase domain.

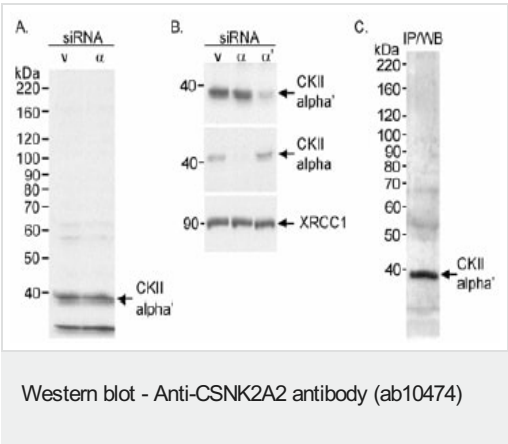
Images



Detection of human and mouse CSNK2A1 by western blot.  
Samples: Whole cell lysate (50  $\mu$ g) from HeLa, HEK293T, Jurkat, mouse TCMK-1, and mouse NIH 3T3 cells prepared using NETN lysis buffer.  
Antibody: Affinity purified rabbit anti-CSNK2A1 antibody A300-199A (lot A300-199A-5) used for WB at 0.1  $\mu$ g/ml.  
Detection: Chemiluminescence

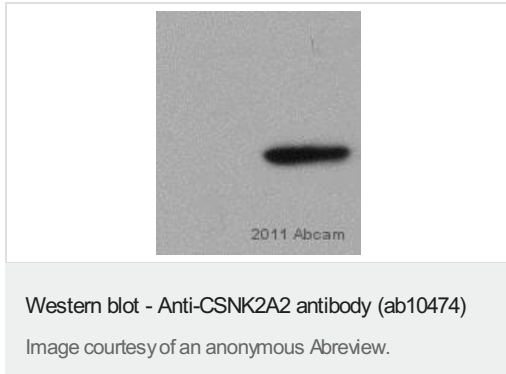


CSNK2A2 was immunoprecipitated from 1mg of HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate with ab10474 at 6  $\mu$ g/ml. Western blot was performed from the immunoprecipitate using ab10474 at 1  $\mu$ g/ml.  
**Lane 1:** ab10474 IP in HeLa whole cell lysate.  
**Lane 2:** Ctrl IgG instead of ab10474.



Detection of human CSNK2A2 by Western blot and immunoprecipitation.  
A. RIPA extract (30 mg) from HeLa cells treated with CSNK2A2 siRNA or vimentin siRNA (v).  
B. RIPA extract (30 mg) from HeLa cells treated with CSNK2A2, CSNK2A2 prime, or vimentin (v) siRNA.  
C. RIPA extract (0.5mg) from HeLa cells.  
Antibody: ab10474 used at 0.33 (A) or 0.2 (B) mg/ml for WB or 5 mg/0.5 mg lysate (C) for IP.

Detection of human CSNK2A2 by Western blot and immunoprecipitation. A. RIPA extract (30 mg) from HeLa cells treated with CSNK2A2 siRNA or vimentin siRNA (v). B. RIPA extract (30 mg) from HeLa cells treated with CSNK2A2, CSNK2A2, or vimentin (v) siRNA. C. RIPA extract (0.5mg) from HeLa cells. Antibody: ab10474 used at 0.33 (A) or 0.2 (B) mg/ml for WB or 5 ug/0.5 mg lysate (C) for IP.



**All lanes** : Anti-CSNK2A2 antibody (ab10474) at 1/500 dilution

**Lane 1** : Whole cell lysate prepared from alpha prime knock out MEFs

**Lane 2** : Whole cell lysate prepared from alpha prime heterozygous MEFs

Lysates/proteins at 40 µg per lane.

#### Secondary

**All lanes** : Goat anti rabbit IgG-HRP at 1/5000 dilution

Developed using the ECL technique.

**Predicted band size:** 41 kDa

**Observed band size:** 37 kDa

**Exposure time:** 30 minutes

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors