


## Product datasheet

### Anti-Src (phospho Y419) antibody ab47411

★ ★ ★ ★ ★ [2 Abreviews](#) [8 References](#) [2 Images](#)

#### Overview

<b>Product name</b>	Anti-Src (phospho Y419) antibody
<b>Description</b>	Rabbit polyclonal to Src (phospho Y419)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Src aa 350-450 (phospho Y419). Database link: <a href="#">P12931</a>
<b>Positive control</b>	Human colon carcinoma tissue; COLO205 cell extracts
<b>General notes</b>	<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: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	This antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab47411 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	★★★★★ (1)	1/500 - 1/1000. Detects a band of approximately 60 kDa (predicted molecular weight: 60 kDa).
IHC-P	★★★★★ (1)	Use at an assay dependent concentration.

## Target

### Function

Non-receptor protein tyrosine kinase that plays pivotal roles in numerous cellular processes such as proliferation, migration, and transformation. In concert with PTK2B, plays an important role in osteoclastic bone resorption. Both the formation of a SRC-PTK2B complex, and SRC kinase activity are necessary for this function. Once it is recruited to the activated integrins, by PTK2B, it phosphorylates CBL which in turn induces the activation and recruitment of phosphatidylinositol 3-kinase to the cell membrane in a signaling pathway that is critical for osteoclast function. Promotes energy production in osteoclasts by activating mitochondrial cytochrome C oxidase. Phosphorylates RUNX3 and COX2 on tyrosine residues, TNK2 on 'Tyr-284' and CBL on 'Tyr-731'. Enhances DDX58/RIG-I-elicited antiviral signaling.

### Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily.  
Contains 1 protein kinase domain.  
Contains 1 SH2 domain.  
Contains 1 SH3 domain.

### Post-translational modifications

Dephosphorylated at Tyr-530 by PTPRJ (By similarity). Phosphorylated on Tyr-530 by c-Src kinase (CSK). The phosphorylated form is termed pp60c-src. Dephosphorylated by PTPRJ at Tyr-419. Normally maintained in an inactive conformation with the SH2 domain engaged with Tyr-530, the SH3 domain engaged with the SH2-kinase linker, and Tyr-419 dephosphorylated. Dephosphorylation of Tyr-530 as a result of protein tyrosine phosphatase (PTP) action disrupts the intramolecular interaction between the SH2 domain and Tyr-530, Tyr-419 can then become autophosphorylated, resulting in SRC activation. Phosphorylation of Tyr-530 by CSK allows this interaction to reform, resulting in SRC inactivation. S-nitrosylation is important for activation of its kinase activity.

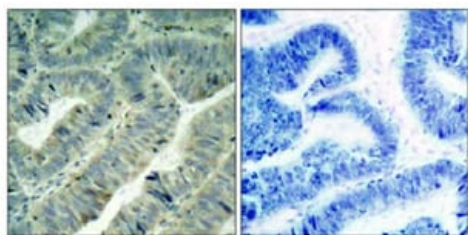
### Cellular localization

Cell membrane. Mitochondrion inner membrane.

### Form

This protein is known to be similar in amino acid sequence to HCK (P08631), LCK (P06239), FYN (P06241), YES1 (P07947), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

## Images



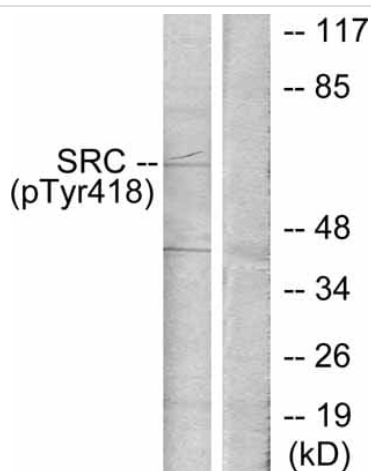
P-Peptide

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Src (phospho Y419) antibody (ab47411)

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue in the presence (right) and absence (left) of blocking phosphopeptide, using ab47411 at 1/50 dilution.



Western blot - Anti-Src (phospho Y419) antibody (ab47411)

**All lanes :** Anti-Src (phospho Y419) antibody (ab47411) at 1/500 dilution

**Lane 1 :** COLO205 cell extracts with serum

**Lane 2 :** COLO205 cell extracts

**Predicted band size:** 60 kDa

Western blot analysis of extracts from COLO205 cells in the presence (lane 2) and absence (lane 1) of serum, using ab47411 at 1/500 dilution.

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

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