

Product datasheet

Anti-Src (phospho Y416) antibody [SrcY416-C4] ab278693

Recombinant

[1 References](#) [4 Images](#)

Overview

Product name	Anti-Src (phospho Y416) antibody [SrcY416-C4]
Description	Rabbit monoclonal [SrcY416-C4] to Src (phospho Y416)
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human Src (phospho Y416). The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: P12931 Run BLAST with Run BLAST with
Positive control	Flow cyt: U937 cells (treated with IFNa, IL4 and pervanadate); NIH3T3 cells (treated with pervanadate).
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.02% Sodium azide Constituents: 49.88% PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA
Purity	Protein A/G purified
Clonality	Monoclonal

Clone number	SrcY416-C4
Isotype	IgG
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab278693 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
Flow Cyt		Use a concentration of 0.001 - 1 µg/ml.

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.

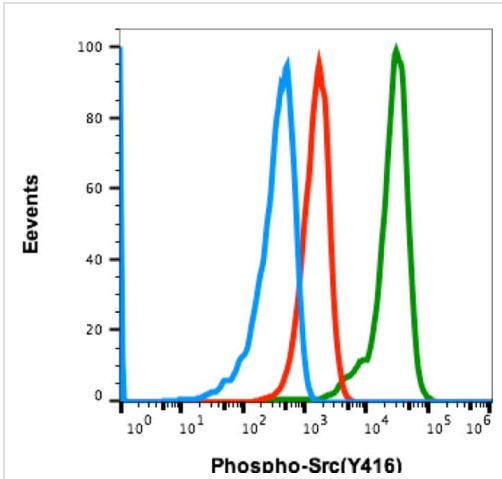
Sequence similarities Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.

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.

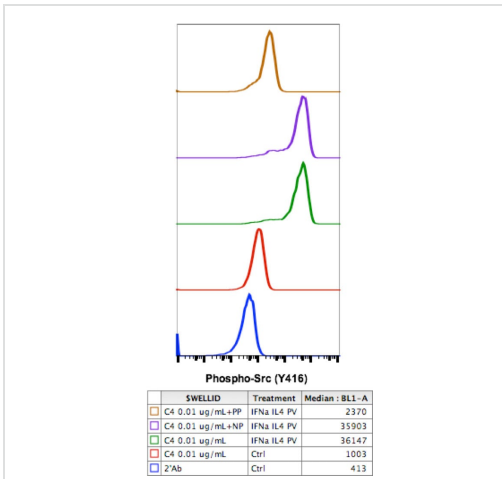
Form This protein is known to be similar in amino acid sequence to HCK (P08631), LCK (P06239), FYN (P06241), YES1 (P07947), and LYN (P07948). Therefore, cross-reactivity with these homologous proteins may be observed. We would be happy to provide immunogen alignment information upon request.

Images



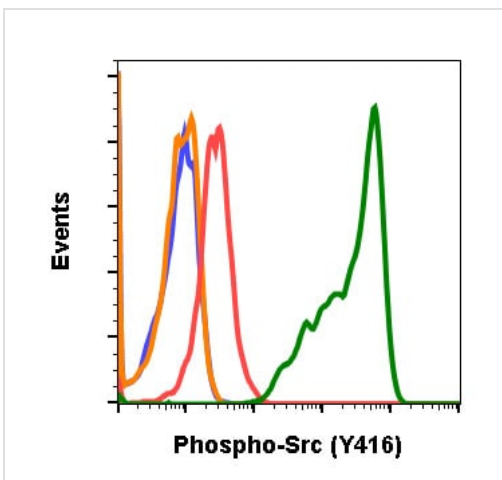
Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) or treated with IFNα IL4 and pervanadate (green) using ab278693 at 0.01 ug/mL.

Flow Cytometry - Anti-Src (phospho Y416) antibody [SrcY416-C4] (ab278693)



Flow cytometric analysis of U937 cells secondary antibody only negative control (blue) or untreated (red) treated with IFNα IL4 and pervanadate (green) or treated + blocked with non-phospho-peptide (purple) or treated + blocked with phospho-peptide (brown) using 0.01 µg/mL ab278693.

Flow Cytometry - Anti-Src (phospho Y416) antibody [SrcY416-C4] (ab278693)



Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or 0.1 µg/mL of isotype control (orange) or treated with imatinib (red) or with pervanadate (green) using ab278693 at 0.1 µg/mL.

Flow Cytometry - Anti-Src (phospho Y416) antibody [SrcY416-C4] (ab278693)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Src (phospho Y416) antibody [SrcY416-C4]
(ab278693)

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