



Product datasheet

APC Anti-Src (phospho Y416) antibody [SrcY416-C4] ab278696

Recombinant

2 Images

Overview

| | |
|----------------------------|--|
| Product name | APC Anti-Src (phospho Y416) antibody [SrcY416-C4] |
| Description | APC Rabbit monoclonal [SrcY416-C4] to Src (phospho Y416) |
| Host species | Rabbit |
| Conjugation | APC. Ex: 645nm, Em: 660nm |
| Tested applications | Suitable for: Flow Cyt |
| Species reactivity | Reacts with: 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 <u>contact</u> our Scientific Support team to discuss your requirements. Database link: <u>P12931</u> |
| | <div>  Run BLAST with </div> <div>  Run BLAST with </div> |
| Positive control | Flow cyt: U937 cells treated with IFNα IL4 and pervanadate. |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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 <p>For more information <u>see here</u>.</p> |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C. Store In the Dark. |
| Storage buffer | Preservative: 0.09% Sodium azide Constituents: 99.71% PBS, 0.2% 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 ab278696 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 5µl for 10 ⁶ cells. |

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.

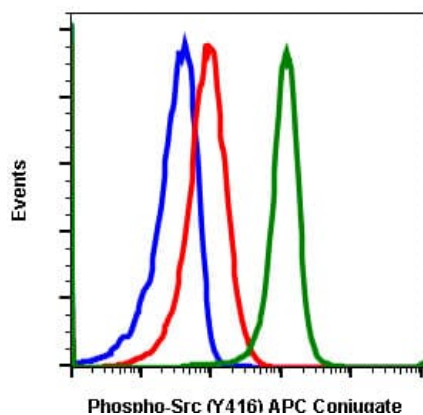
Sequence similarities Belongs to the protein kinase superfamily. Tyr protein kinase family. SRC subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.

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 Cytometry - APC Anti-Src (phospho Y416)
antibody [SrcY416-C4] (ab278696)

Flow cytometric analysis of U937 cells unstained untreated cells as negative control (blue) or stained and untreated (red) or treated with IFNa IL4 and pervanadate (green) using ab278696.

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

APC Anti-Src (phospho Y416) antibody [SrcY416-C4] (ab278696)

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

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