

## Summary

<b>Production Name</b>	Src (3W13) Rabbit Monoclonal Antibody
<b>Description</b>	Rabbit Monoclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	SRC
<b>Alternative Names</b>	EC 2.7.10.2; p60-Src; c-Src; pp60;c-src;
<b>Gene ID</b>	6714.0
<b>SwissProt ID</b>	P12931.A synthetic peptide of human Src

## Application

<b>Dilution Ratio</b>	WB: 1:2000-1:10000
<b>Molecular Weight</b>	60kDa

## Background

The Src family of protein tyrosine kinases, which includes Src, Lyn, Fyn, Yes, Lck, Blk, and Hck, are important in the

**Product Name: Src (3W13) Rabbit Monoclonal Antibody**  
**Catalog #: AMRe18261**



regulation of growth and differentiation of eukaryotic cells (1). Src activity is regulated by tyrosine phosphorylation at two sites, but with opposing effects. Non-receptor protein tyrosine kinase which is activated following engagement of many different classes of cellular receptors including immune response receptors, integrins and other adhesion receptors, receptor protein tyrosine kinases, G protein-coupled receptors as well as cytokine receptors. Participates in signaling pathways that control a diverse spectrum of biological activities including gene transcription, immune response, cell adhesion, cell cycle progression, apoptosis, migration, and transformation. Due to functional redundancy between members of the SRC kinase family, identification of the specific role of each SRC kinase is very difficult. SRC appears to be one of the primary kinases activated following engagement of receptors and plays a role in the activation of other protein tyrosine kinase (PTK) families. Receptor clustering or dimerization leads to recruitment of SRC to the receptor complexes where it phosphorylates the tyrosine residues within the receptor cytoplasmic domains. Plays an important role in the regulation of cytoskeletal organization through phosphorylation of specific substrates such as AFAP1. Phosphorylation of AFAP1 allows the SRC SH2 domain to bind AFAP1 and to localize to actin filaments. Cytoskeletal reorganization is also controlled through the phosphorylation of cortactin (CTTN) (Probable). When cells adhere via focal adhesions to the extracellular matrix, signals are transmitted by integrins into the cell resulting in tyrosine phosphorylation of a number of focal adhesion proteins, including PTK2/FAK1 and paxillin (PXN) (PubMed:[21411625](http://www.uniprot.org/citations/21411625)). In addition to phosphorylating focal adhesion proteins, SRC is also active at the sites of cell-cell contact adherens junctions and phosphorylates substrates such as beta-catenin (CTNNB1), delta-catenin (CTNND1), and plakoglobin (JUP). Another type of cell-cell junction, the gap junction, is also a target for SRC, which phosphorylates connexin-43 (GJA1). SRC is implicated in regulation of pre-mRNA-processing and phosphorylates RNA-binding proteins such as KHDRBS1 (Probable). Also plays a role in PDGF-mediated tyrosine phosphorylation of both STAT1 and STAT3, leading to increased DNA binding activity of these transcription factors (By similarity). Involved in the RAS pathway through phosphorylation of RASA1 and RASGRF1 (PubMed:[11389730](http://www.uniprot.org/citations/11389730)). Plays a role in EGF-mediated calcium-activated chloride channel activation (PubMed:[18586953](http://www.uniprot.org/citations/18586953)). Required for epidermal growth factor receptor (EGFR) internalization through phosphorylation of clathrin heavy chain (CLTC and CLTCL1) at 'Tyr- 1477'. Involved in beta-arrestin (ARRB1 and ARRB2) desensitization through phosphorylation and activation of GRK2, leading to beta-arrestin phosphorylation and internalization. Has a critical role in the stimulation of the CDK20/MAPK3 mitogen-activated protein kinase cascade by epidermal growth factor (Probable). Might be involved not only in mediating the transduction of mitogenic signals at the level of the plasma membrane but also in controlling progression through the cell cycle via interaction with regulatory proteins in the nucleus (PubMed:[7853507](http://www.uniprot.org/citations/7853507)). Plays an important role in osteoclastic bone resorption in conjunction with PTK2B/PYK2. Both the formation of a SRC-PTK2B/PYK2 complex and SRC kinase activity are necessary for this function. Recruited to activated integrins by PTK2B/PYK2, thereby phosphorylating 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 (PubMed:[8755529](http://www.uniprot.org/citations/8755529), PubMed:[8755529](http://www.uniprot.org/citations/8755529)), PubMed:[8755529](http://www.uniprot.org/citations/8755529)

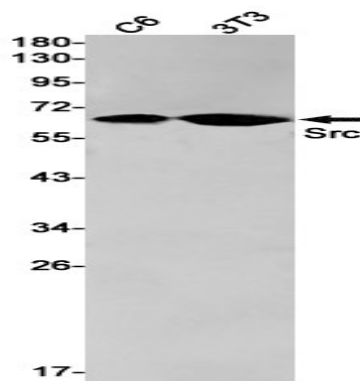
**Product Name: Src (3W13) Rabbit Monoclonal Antibody**  
**Catalog #: AMRe18261**



<http://www.uniprot.org/citations/14585963> target="\_blank">14585963</a>). Promotes energy production in osteoclasts by activating mitochondrial cytochrome C oxidase (PubMed:<a href="http://www.uniprot.org/citations/12615910">http://www.uniprot.org/citations/12615910 target="\_blank">12615910</a>). Phosphorylates DDR2 on tyrosine residues, thereby promoting its subsequent autophosphorylation (PubMed:<a href="http://www.uniprot.org/citations/16186108">http://www.uniprot.org/citations/16186108 target="\_blank">16186108</a>). Phosphorylates RUNX3 and COX2 on tyrosine residues, TNK2 on 'Tyr-284' and CBL on 'Tyr-731' (PubMed:<a href="http://www.uniprot.org/citations/20100835">http://www.uniprot.org/citations/20100835 target="\_blank">20100835</a>, PubMed:<a href="http://www.uniprot.org/citations/21309750">http://www.uniprot.org/citations/21309750 target="\_blank">21309750</a>). Enhances DDX58/RIG-I-elicited antiviral signaling (PubMed:<a href="http://www.uniprot.org/citations/19419966">http://www.uniprot.org/citations/19419966 target="\_blank">19419966</a>). Phosphorylates PDPK1 at 'Tyr-9', 'Tyr-373' and 'Tyr-376' (PubMed:<a href="http://www.uniprot.org/citations/14585963">http://www.uniprot.org/citations/14585963 target="\_blank">14585963</a>). Phosphorylates BCAR1 at 'Tyr-128' (PubMed:<a href="http://www.uniprot.org/citations/22710723">http://www.uniprot.org/citations/22710723 target="\_blank">22710723</a>). Phosphorylates CBLC at multiple tyrosine residues, phosphorylation at 'Tyr-341' activates CBLC E3 activity (PubMed:<a href="http://www.uniprot.org/citations/20525694">http://www.uniprot.org/citations/20525694 target="\_blank">20525694</a>). Involved in anchorage-independent cell growth (PubMed:<a href="http://www.uniprot.org/citations/19307596">http://www.uniprot.org/citations/19307596 target="\_blank">19307596</a>). Required for podosome formation (By similarity). Mediates IL6 signaling by activating YAP1-NOTCH pathway to induce inflammation-induced epithelial regeneration (PubMed:<a href="http://www.uniprot.org/citations/25731159">http://www.uniprot.org/citations/25731159 target="\_blank">25731159</a>).

## Research Area

## Image Data



Western blot detection of Src in C6,3T3 cell lysates using Src antibody(1:1000 diluted).

## Note

For research use only.