

Rabbit Phospho-SRC (Y215) Polyclonal Antibody | anti-SRC antibody

Phospho-SRC (Y215) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284306	Rabbit	Human (Predicted Reactivity: Mouse, Rat, Zebrafish, Chicken, Xenopus)	ELISA, Western Blot

PRODUCT SYNONYMS

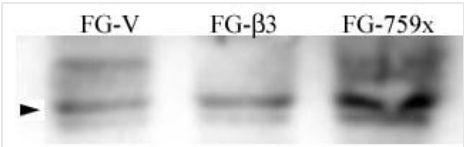
Phospho-SRC (Y215); Polyclonal Antibody; Phospho-SRC (Y215) Antibody; Proto-oncogene tyrosine-protein kinase Src; Proto-oncogene c-Src; pp60c-src; p60-Src; SRC; SRC1; anti-SRC antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Mouse, Rat, Zebrafish, Chicken, Xenopus)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This SRC Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y215 of human SRC.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.33 (varies by lot)
Sequence Length	542
Applicable Applications for anti-SRC antibody	ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Clone Names	RB8173
Antigen Source	HUMAN

Function	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). 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). 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. Also plays a role in PDGF-mediated tyrosine phosphorylation of both STAT1 and STAT3, leading to increased DNA binding activity of these transcription factors. Involved in the RAS pathway through phosphorylation of RASA1 and RASGRF1. Plays a role in EGF-mediated calcium-activated chloride channel activation. 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. 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. 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. Promotes energy production in osteoclasts by activating mitochondrial cytochrome C oxidase. Phosphorylates DDR2 on tyrosine residues, thereby promoting its subsequent autophosphorylation. Phosphorylates RUNX3 and COX2 on tyrosine residues, TNK2 on 'Tyr-284' and CBL on 'Tyr-731'. Enhances DDX58/RIG-I-elicited antiviral signaling. Phosphorylates PDPK1 at 'Tyr-9', 'Tyr-373' and 'Tyr-376'. Phosphorylates BCAR1 at 'Tyr- 128'. Phosphorylates CBLC at multiple tyrosine residues, phosphorylation at 'Tyr-341' activates CBLC E3 activity. Required for podosome formation (By similarity).
Cellular Location	Cell membrane. Mitochondrion inner membrane. Nucleus. Cytoplasm, cytoskeleton. Note = Localizes to focal adhesion sites following integrin engagement. Localization to focal adhesion sites requires myristoylation and the SH3 domain
Tissue Location	Expressed ubiquitously. Platelets, neurons and osteoclasts express 5-fold to 200-fold higher levels than most other tissues
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)
 FG Pancreatic Carcinoma Cell Lines stably expressing vector along (FG-V) the b3 integrin subunit (FG-b3) or a b3 truncation mutant (FG-759x).Phospho-Src-Y215 Antibody (AAA284306) was diluted 1:500 in 1% BSA/TBST and incubated Overnight at 4

ADDITIONAL INFORMATION

Related Product Information for anti-SRC antibody	This gene is highly similar to the v-src gene of Rous sarcoma virus. This proto-oncogene may play a role in the regulation of embryonic development and cell growth. The protein encoded by this gene is a tyrosine-protein kinase whose activity can be inhibited by phosphorylation by c-SRC kinase. Mutations in this gene could be involved in the malignant progression of colon cancer. Two transcript variants encoding the same protein have been found for this gene. Transcript Variant: This variant (1) represents the longer transcript. Both isoforms 1 and 2 encode the same protein.
Product Categories/Family for anti-SRC antibody	Cancer; Signal Transduction; Phospho Antibodies
References	Encinas, M., et al., J. Biol. Chem. 279(18):18262-18269 (2004). Wrobel, C.N., et al., J. Cell Biol. 165(2):263-273 (2004). Haraguchi, K., et al., Biochem. Biophys. Res. Commun. 313(4):841-844 (2004). Shi, C.S., et al., J. Biol. Chem. 279(17):17224-17231 (2004). Hofmann, M., et al., Biochem. Biophys. Res. Commun. 316(3):673-679 (2004).

NCBI AND UNIPROT INFORMATION

NCBI GI #	4885609
NCBI GeneID	6714
NCBI Accession #	NP_005408.1; NP_938033.1
NCBI GenBank Nucleotide #	NM_005417.4
UniProt Accession #	P12931; Q76P87; Q86VB9; Q9H5A8; E1P5V4
Molecular Weight	59835
NCBI Official Full Name	proto-oncogene tyrosine-protein kinase Src
NCBI Official Synonym Full Names	SRC proto-oncogene, non-receptor tyrosine kinase
NCBI Official Symbol	SRC
NCBI Official Synonym Symbols	ASV; SRC1; c-SRC; p60-Src
NCBI Protein Information	proto-oncogene tyrosine-protein kinase Src
UniProt Protein Name	Proto-oncogene tyrosine-protein kinase Src
UniProt Gene Name	SRC
UniProt Synonym Gene Names	SRC1; p60-Src
UniProt Entry Name	SRC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/phospho-src-y215-antibody-western-blot-elisa/284306>