

Src (Phospho-Tyr530) Rabbit mAb

Catalog No: #52704

Package Size: #52704-1 50ul #52704-2 100ul

Description

Product Name	Src (Phospho-Tyr530) Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	S03-8H8
Isotype	IgG
Purification	Affinity Purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Human, Mouse, Rat
Immunogen Description	A synthetic phosphopeptide corresponding to residues surrounding Tyr529 of human Src
Conjugates	Unconjugated
Modification	Phosphorylated
Other Names	ASV; SRC1; THC6; c-SRC; p60-Src
Accession No.	Swiss-Prot:P12931 GenelD:6714
Calculated MW	Predicted band size: 60 kDa
SDS-PAGE MW	Observed band size: 60kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

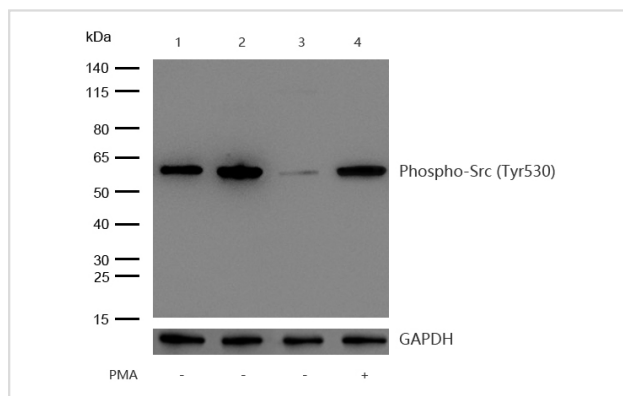
Application Details

WB: 1:500-1:2000

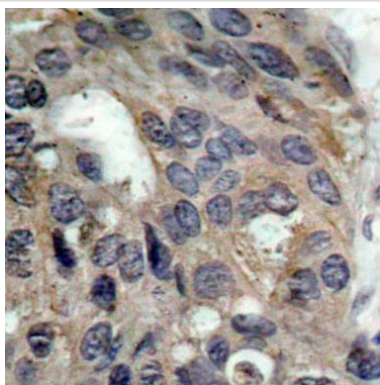
ICC/IF: 1:50-1:200

IHC: 1:50-1:200

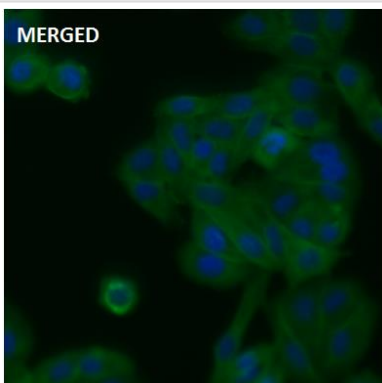
Images



All lanes : Src (Phospho-Tyr530) Rabbit mAb at 1/1k dilution
 Lane 1 : Mouse Brain lysates
 Lane 2 : Rat Brain lysates
 Lane 3 : HT29 whole cell lysates
 Lane 4 : HT29 treated with 200nM PMA for 30 min whole cell lysates
 Lysates/proteins at 20 µg per lane.
 Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution
 Predicted band size: 60 kDa
 Observed band size: 60kDa
 Exposure time: 8 seconds



Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for Src (Phospho-Tyr530) using 52704 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence Src (Phospho-Tyr530) antibody (52704)
ICC/IF staining of Src (Phospho-Tyr530) in HeLa cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100. Samples were incubated with 52704 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit, used at a dilution of 1/500. Nuclei were counterstained with DAPI.

Background

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).

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).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.