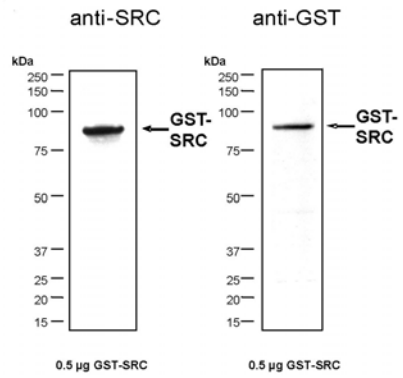
Recombinant Src protein

Catalog No: 31195
Expressed In: Baculovirus

Quantity: 10 µg
Concentration: 0.239 µg/µl
Source: Human

Buffer Contents: 10 µg of Recombinant Src protein in 50 mM HEPES, pH 7.5; 100 mM NaCl, 5 mM DTT, 4 mM reduced glutathione, 20% glycerol. Protein is supplied at 0.239 µg/µl.

Background: The proto-oncogene tyrosine-protein kinase **Src** is a non-receptor protein tyrosine protein kinase that is involved in different signal transduction pathways that regulate such vital cellular processes as cell-cell interactions, cell migration, transcription and proliferation through the phosphorylation of many substrates. It is one of eight members of the **Src family** of non-receptor tyrosine kinases (Src, Fyn, Yes, Lck, Lyn, Hck, Fgr and Blk) that interact with the intracellular domains of growth factor/cytokine receptors, GPCRs and integrins. Members of the Src kinase family have a very similar domain structure with a high degree of homology in the SH1 (catalytic), linker, SH2 (p-Tyr binding), SH3 (protein-protein interaction) and SH4 (membrane association) domains. c-Src, Fyn and Yes are ubiquitously expressed, although high levels of c-Src are found in platelets, neural tissue and osteoclasts. The activity of the Src kinase family can also be regulated by phosphatases (e.g. SHP1), binding to adaptor proteins (e.g. CBP) and proteasomal degradation. Src kinases are key upstream mediators of both the PI 3-K and MAPK signaling pathways, and have been shown to have important
roles in cell proliferation, migration and survival.



Protein Details: Recombinant human Src protein was produced using baculovirus infected Sf9 cells. The protein was made against amino acids M1-L536, accession number NM_005417 and N-terminally fused to GST-HIS6-Thrombin site. Purified by GSH-agarose affinity purification.

Application Notes: Recombinant Src is suitable for kinase assays and Western blot. The molecular weight of the protein is ~89.744 kDa. The activity of the protein is ~ 142 pmol/µg min.

Recommended kinase reaction conditions: 60 mM HEPES-NaOH, pH 7.5, 3 mM $MgCl_2$, 3 mM $MnCl_2$, 3 µM Na-orthovanadate, 1.2 mM DTT, ATP (variable), 2.5 µg/50 µl PEG20.000, Substrate: PolyEY, 1 µg / 50 µl, Recombinant Src: 20 ng/50 µl.

Kinase activity may vary depending on the substrate and reaction conditions used.

Storage and Guarantee: This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.