

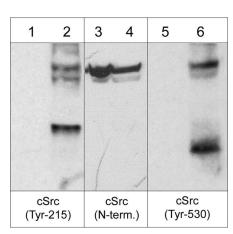
c-Src (Tyr-530)[conserved site], phospho-specific

Mouse Monoclonal

Cat. # SM2611 **Size** 100 μl

Background

c-Src was the first proto-oncogenic non-receptor tyrosine kinase characterized in human. The Src family is composed of nine members in vertebrates, including c-Src, Yes, Fgr, Yrk, Fyn, Lyn, Hck, Lck, and Blk. Src-family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility, and adhesion. Src-family kinases contain an N-terminal cell membrane anchor followed by SH3 and SH2 domains. The activity of c-Src is regulated by tyrosine phosphorylation at multiple sites. Tyrosine 418 is autophosphorylated following c-Src activation. Tyrosine 215 in the SH2 domain of c-Src is phosphorylated following growth factor receptor activation. Both Tyr-215 and Tyr-418 phosphorylation increases tyrosine kinase activity, while phosphorylation of Tyr-530 downregulates c-Src kinase activity. Thus, tyrosine phosphorylation of c-Src is critical for regulating its kinase activity.



Western blot analysis of mouse SYF cells transformed with c-Src then left untreated (lanes 1, 3, & 5) or treated with pervanadate (1 mM) for 30 minutes (lanes 2, 4, & 6). The blot was probed with anti-c-Src (Tyr-215) (lanes 1 & 2), anti-c-Src (N-terminal region) (lanes 3 & 4), and anti-c-Src (Tyr-530) (lanes 5 & 6).

Background References

Stover, D.R. et al. (1996) J Biol Chem 271(21):12481. Obergfell, A. et al. (2002) J Cell Biol. 157(2):265. Vadlamudi, R.K. et al. (2003) FEBS Letters 543:76.

Applications Species Reactivity Specificity

WB 1:500 Hu, Rt, Ms

ELISA 1:2000

End user should determine optimal dilution for their particular applications

and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Isotype: IgG1

This antibody detects a 60 kDa* protein corresponding to c-Src on SDS-PAGE immunoblots of mouse SYF cells transformed with c-Src and treated with pervanadate. This antibody also detects the conserved site in Lck (Tyr-505) in human Jurkat cells treated with pervanadate. This antibody may detect several c-Src family members phosphorylated at the conserved site for Tyr-530.

Immunogen Uniprot ID: P12931

Clone (M261) was generated from a phosphopeptide containing amino acid surrounding Tyr-530 at the C-terminus of human c-Src. This sequence has high homology to the conserved site in rat and mouse c-Src, and is conserved in the c-Src family of kinases.

Buffer and Storage

Mouse monoclonal antibody purified with protein A chromatography is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at –20°C. Stable for 1 year.

Related Products

CM2471 Csk (N-terminal region) Mouse Monoclonal

FM2381 Fyn (N-terminal region) Mouse Monoclonal

LM2541 Lck (N-terminal region) Mouse Monoclonal

SM2591 c-Src (N-terminal region) Mouse Monoclonal

SP1371 c-Src (Tyr-215)[conserved site], phospho-specific Rabbit Polyclonal

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

www.ecmbio.com toll-free: 1-800-859-8202 info@ecmbio.com telephone: 859-879-2075

^{*}All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot