

Csk (B-7): sc-166513

BACKGROUND

All members of the Src gene family of tyrosine kinases are characterized by a carboxy-terminal domain tyrosine which is highly phosphorylated in the inactive form of the enzyme and phosphorylated to a much lesser extent when the enzyme is active. In the case of Src p60, Y527 is this tyrosine; however, a mutant form of c-Src in which Y527 is replaced by phenylalanine is transforming and displays 5- to 10-fold elevated kinase activity compared to its normal counterpart. Csk has been identified as an Src-related tyrosine kinase having both SH2 and SH3 domains and a catalytic domain, but lacking sequences amino-terminal to the SH3 domain as well as carboxy-terminal regulatory sequences. Csk phosphorylates Src on Y527 and also downregulates Lyn, Fyn and Lck by tyrosine phosphorylation of carboxy-terminal regulatory sites.

CHROMOSOMAL LOCATION

Genetic locus: CSK (human) mapping to 15q24.1; Csk (mouse) mapping to 9 B.

SOURCE

Csk (B-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-35 at the N-terminus of Csk of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166513 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Csk (B-7) is recommended for detection of Csk of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Csk (B-7) is also recommended for detection of Csk in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Csk siRNA (h): sc-39161, Csk siRNA (m): sc-38971, Csk shRNA Plasmid (h): sc-39161-SH, Csk shRNA Plasmid (m): sc-38971-SH, Csk shRNA (h) Lentiviral Particles: sc-39161-V and Csk shRNA (m) Lentiviral Particles: sc-38971-V.

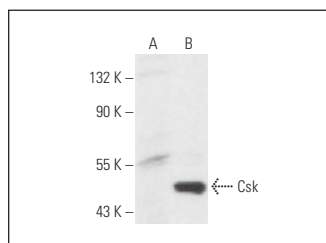
Molecular Weight of Csk: 50 kDa.

Positive Controls: Csk (m): 293T Lysate: sc-119481, BC₃H1 cell lysate: sc-2299 or Csk (h): 293T Lysate: sc-111742.

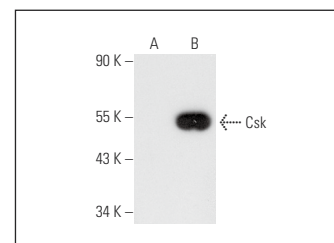
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Csk (B-7): sc-166513. Western blot analysis of Csk expression in non-transfected: sc-117752 (A) and human Csk transfected: sc-111742 (B) 293T whole cell lysates.



Csk (B-7): sc-166513. Western blot analysis of Csk expression in non-transfected: sc-117752 (A) and mouse Csk transfected: sc-119481 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Voisinne, G., et al. 2016. Co-recruitment analysis of the CBL and CBLB signalosomes in primary T cells identifies CD5 as a key regulator of TCR-induced ubiquitylation. *Mol. Syst. Biol.* 12: 876.
- Sun, B. and Zhong, F.J. 2021. ELTD1 promotes gastric cancer cell proliferation, invasion and epithelial-mesenchymal transition through MAPK/ERK signaling by regulating Csk. *Int. J. Gen. Med.* 14: 4897-4911.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.