

# Csk (H-75): sc-13074

## 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 a 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.

## REFERENCES

- Okada, M., et al. 1989. A protein tyrosine kinase involved in regulation of pp60c-src function. *J. Biol. Chem.* 264: 20886-20893.
- Nada, S., et al. 1991. Cloning of a complementary DNA for a protein-tyrosine kinase that specifically phosphorylates a negative regulatory site of p60c-src. *Nature* 351: 69-72.
- Cooper, J.A., et al. 1993. The when and how of Src regulation. *Cell* 73: 1051-1054.

## CHROMOSOMAL LOCATION

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

## SOURCE

Csk (H-75) is a rabbit polyclonal antibody raised against amino acids 1-75 mapping at the N-terminus of Csk p50 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Csk (H-75) is recommended for detection of Csk p50 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 (H-75) is also recommended for detection of Csk p50 in additional species, including canine, bovine, porcine and avian.

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.

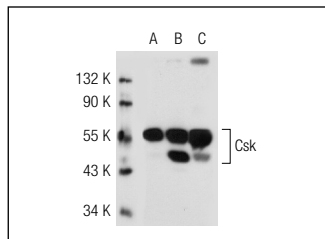
Molecular Weight of Csk: 50 kDa.

Positive Controls: Csk (h): 293T Lysate: sc-111742, Csk (m): 293T Lysate: sc-119481 or Jurkat whole cell lysate: sc-2204.

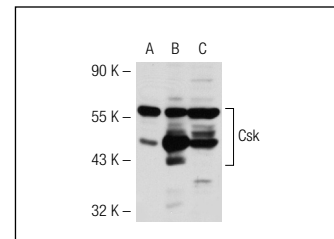
## STORAGE

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

## DATA



Csk (H-75): sc-13074. Western blot analysis of Csk expression in non-transfected 293T: sc-117752 (A), human Csk transfected 293T: sc-111742 (B) and Jurkat (C) whole cell lysates.



Csk (H-75): sc-13074. Western blot analysis of Csk expression in non-transfected 293T: sc-117752 (A), mouse Csk transfected 293T: sc-119481 (B) and Jurkat (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Roux, M.M., et al. 2006. A functional genomic and proteomic perspective of sea urchin calcium signaling and egg activation. *Dev. Biol.* 300: 416-433.
- Hieronimus, H., et al. 2006. Gene expression signature-based chemical genomic prediction identifies a novel class of HSP 90 pathway modulators. *Cancer Cell* 10: 321-330.
- Caldas-Lopes, E., et al. 2009. HSP 90 inhibitor PU-H71, a multimodal inhibitor of malignancy, induces complete responses in triple-negative breast cancer models. *Proc. Natl. Acad. Sci. USA* 106: 8368-8373.
- Jin, N., et al. 2015. Truncation and activation of dual specificity tyrosine phosphorylation-regulated kinase 1A by Calpain I: a molecular mechanism linked to tau pathology in Alzheimer disease. *J. Biol. Chem.* 290: 15219-15237.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **Csk (E-3): sc-166560** or **Csk (B-7): sc-166513**, our highly recommended monoclonal alternatives to Csk (H-75).