

Csk (C-20): sc-286

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.

CHROMOSOMAL LOCATION

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

SOURCE

Csk (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Csk 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.

Blocking peptide available for competition studies, sc-286 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Csk (C-20) 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), immunohistochemistry (including paraffin-embedded sections) (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 (C-20) is also recommended for detection of Csk p50 in additional species, including equine, 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: CTLL-2 cell lysate: sc-2242, Csk (m): 293T Lysate: sc-119481 or Jurkat whole cell lysate: sc-2204.

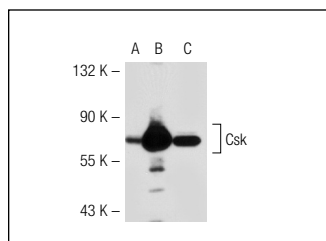
STORAGE

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

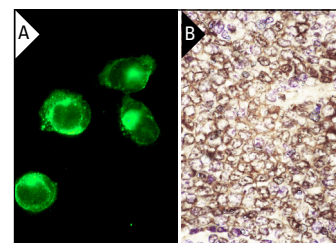
RESEARCH USE

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

DATA



Csk (C-20): sc-286. 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.



Csk (C-20): sc-286. Immunofluorescence staining of methanol-fixed Jurkat cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded normal human spleen (B).

SELECT PRODUCT CITATIONS

- Sidorenko, S., et al. 1995. Human spleen tyrosine kinase p72Syk associates with the Src-family kinase p53/56 Lyn and a 120 kDa phosphoprotein. *Proc. Natl. Acad. Sci. USA* 92: 359-363.
- Grochow, G., et al. 2009. Requirement for CD45 in fine-tuning mast cell responses mediated by different ligand-receptor systems. *Cell. Signal.* 21: 1277-1286.
- Pantera, B., et al. 2009. PrPc activation induces neurite outgrowth and differentiation in PC12 cells: role for caveolin-1 in the signal transduction pathway. *J. Neurochem.* 110: 194-207.
- D'Arco, M., et al. 2009. CSK-mediated tyrosine phosphorylation is a novel molecular mechanism to limit P2X3 receptor function in mouse sensory neurons. *J. Biol. Chem.* 284: 21393-21401.
- Ricono, J.M., et al. 2009. Specific cross-talk between epidermal growth factor receptor and integrin $\alpha v \beta 5$ promotes carcinoma cell invasion and metastasis. *Cancer Res.* 69: 1383-1391.
- Jin, H., et al. 2010. A PKA-Csk-pp60Src signaling pathway regulates the switch between endothelial cell invasion and cell-cell adhesion during vascular sprouting. *Blood* 116: 5773-5783.
- Narute, P.S., et al. 2012. Nef alleles from all major HIV-1 clades activate Src-family kinases and enhance HIV-1 replication in an inhibitor-sensitive manner. *PLoS ONE* 7: e32561.
- de la Puerta, M.L., et al. 2013. The autoimmunity risk variant LYP-W620 cooperates with CSK in the regulation of TCR signaling. *PLoS ONE* 8: e54569.

MONOS
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Try **Csk (E-3): sc-166560** or **Csk (B-7): sc-166513**, our highly recommended monoclonal alternatives to Csk (C-20).