

Csk (C74C1) Rabbit mAb

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S	H M R Mk Pg	Endogenous	50	Rabbit IgG	#P41240	1445

Product Usage Information**Application**

Western Blotting
Simple Western™

Dilution

1:1000
1:10 - 1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Csk (C74C1) Rabbit mAb detects endogenous levels of total Csk protein. This antibody does not cross-react with other proteins.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding amino acid residue Val399 of human Csk.

Background

Carboxy-terminal Src kinase (Csk) is a ubiquitously expressed nonreceptor tyrosine kinase that negatively regulates the Src family kinases (SFKs) by phosphorylation of the SFK carboxy-terminal tyrosine (1,2). Phosphorylated carboxy-terminal tyrosine binds to the SH2 domain of SFK intramolecularly and leads to folding and inactivation of the SFK (3). This Csk-catalyzed SFK tyrosine phosphorylation is highly specific and exclusive. The SFK carboxy-terminal tyrosine is the only known physiological substrate of Csk (4).

Csk consists of an SH2, an SH3, and a kinase domain. There is evidence that the SH2 and SH3 domains are essential for the regulation of SFK, and Csk can be recruited to the membrane where SFKs are in an active state. This process is mediated by a Csk-binding protein (Cbp, also called PAG), which binds tightly to the SH2 domain of Csk (5). Activation of SFK by extracellular stimuli leads to the tyrosine phosphorylation of Cbp, generating docking sites for Csk. The recruitment of Csk forms a feedback mechanism for termination of SFK function (6).

Background References

1. Nada, S. et al. (1991) *Nature* 351, 69-72.
2. Nada, S. et al. (1993) *Cell* 73, 1125-35.
3. Lee, S. et al. (2003) *Proc Natl Acad Sci U S A* 100, 14707-12.
4. Imamoto, A. and Soriano, P. (1993) *Cell* 73, 1117-24.
5. Kawabuchi, M. et al. (2000) *Nature* 404, 999-1003.
6. Matsuoka, H. et al. (2004) *J Biol Chem* 279, 5975-83.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey **Pg:** Pig

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no

force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.