

SAM68 Antibody

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	H M R Mk	Endogenous	68	Rabbit	#Q07666	10657

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

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

Specificity/Sensitivity

SAM68 Antibody recognizes endogenous levels of total SAM68 protein.

Species predicted to react based on 100% sequence homology

Hamster, Bovine, Dog, Pig, Horse, Guinea Pig

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human SAM68 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Src associated in mitosis 68 kDa (SAM68) is a member of the signal transduction and activation of RNA (STAR) family of RNA binding proteins (1,2). SAM68 is a multi-functional protein with roles in signal transduction, cell cycle regulation, transcription, and alternative splicing (1-3). SAM68 acts as a scaffold protein mediating responses to various stimuli that activate receptors, such as the T-cell receptor and the insulin receptor, linking activation of various signal transduction pathways with post-transcriptional gene regulation (3). SAM68 is a target for phosphorylation by Src-related kinases and Erk1/2 mitogen-activated protein kinases. Phosphorylation of SAM68 regulates both its affinity for RNA and alternative splicing of RNAs like CD44 receptor mRNA (1,4). Many of the activities of SAM68 and its targets for alternative splicing have been implicated in the development and progression of spinal muscular atrophy and cancers such as prostate and breast carcinomas, where SAM68 is frequently upregulated (1,5-8).

Background References

1. Bielli, P. et al. (2011) *Endocr Relat Cancer* 18, R91-R102.
2. Lukong, K.E. and Richard, S. (2003) *Biochim Biophys Acta* 1653, 73-86.
3. Najib, S. et al. (2005) *Cell Mol Life Sci* 62, 36-43.
4. Matter, N. et al. (2002) *Nature* 420, 691-5.
5. Pedrotti, S. et al. (2010) *EMBO J* 29, 1235-47.
6. Busà, R. et al. (2007) *Oncogene* 26, 4372-82.
7. Rajan, P. et al. (2008) *J Pathol* 215, 67-77.
8. Song, L. et al. (2010) *J Pathol* 222, 227-37.

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

Cross-Reactivity Key

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

Trademarks and Patents

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

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.