Store at -20°C

#2932

SOCS3 (L210) Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 05/19/10

Entrez-Gene ID #9021
Swiss-Prot Acc. #O14543

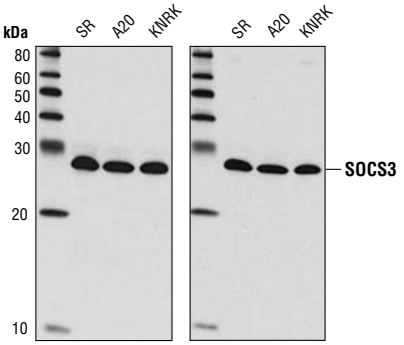
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, (Mk, B, Dg)	26 kDa	Rabbit**

Background: The SOCS (suppressor of cytokine signaling) family members are negative regulators of cytokine signal transduction that inhibit the Jak/Stat pathway (1-3). The SOCS family consists of at least 8 members including the originally identified protein CIS1 (cytokine-inducible SH2-containing protein) as well as SOCS1 through SOCS7. Each SOCS family member contains a central SH2 domain and a conserved carboxy-terminal motif designated as the SOCS box. These proteins are important regulators of cytokine signaling, proliferation, differentiation and immune responses.

Low levels of SOCS3 are observed in lung, spleen and thymus and, like other SOCS family members, its expression is rapidly induced by a number of factors including interleukins, EPO, IFN-γ, CSF and TNF-α (4). SOCS3 uses its SH2 domain to bind activated Jaks and their cognate receptors to provide negative feedback inhibition. In addition to the initially described inducers of SOCS3 expression, subsequent studies have described SOCS3-mediated negative feedback inhibition for leptin (5), GH (6), chemokine receptors (7), insulin (8), and certain pathogens (9,10). SOCS3 deletion results in embryonic lethality with placental insufficiency (11). SOCS3 signaling has been linked pathologically to allergic responses (12), inflammatory disease (13), endotoxic shock (14), wound repair (15), and obesity (16,17).

Specificity/Sensitivity: SOCS3 (L210) Antibody detects endogenous levels of total SOCS3 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu210 of SOCS3. Antibodies were purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell types using SOCS3 (L210) Antibody (left) and SOCS3 Antibody #2923 (right).

Background References:

(1) Alexander, W.S. et al. (1999) *J Leukoc Biol* 66, 588–92.
(2) Chen, X.P. et al. (2000) *Immunity* 13, 287–90.
(3) Hilton, D.J. et al. (1998) *Proc Natl Acad Sci USA* 95, 114–9.
(4) Starr, R. et al. (1997) *Nature* 387, 917–21.
(5) Bjørbaek, C. et al. (1998) *Mol Cell* 1, 619–25.
(6) Adams, T.E. et al. (1998) *J Biol Chem* 273, 1285–7.
(7) Soriano, S.F. et al. (2002) *J Exp Med* 196, 311–21.
(8) Emanuelli, B. et al. (2000) *J Biol Chem* 275, 15985–91.
(9) Stoiber, D. et al. (1999) *J Immunol* 163, 2640–7.
(10) Stoiber, D. et al. (2001) *J Immunol* 166, 466–72.
(11) Roberts, A.W. et al. (2001) *Proc Natl Acad Sci U S A* 98, 9324–9.
(12) Seki, Y. et al. (2003) *Nat Med* 9, 1047–54.
(13) Shouda, T. et al. (2001) *J Clin Invest* 108, 1781–8.
(14) Fang, M. et al. (2005) *Cell Mol Immunol* 2, 373–7.
(15) Goren, I. et al. (2006) *J Invest Dermatol* 126, 477–85.
(16) Mori, H. et al. (2004) *Nat Med* 10, 739–43.
(17) Howard, J.K. et al. (2004) *Nat Med* 10, 734–8.

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.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.