

## **SOCS3Polyclonal Antibody**

Catalog Number: E90694

Amount: 100ul

Background: T

The suppressor of cytokine signaling (SOCS) 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 cytokine-inducible SH2-containing protein (CIS1), as well as SOCS1-7. 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 levels 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).

Species: Rabbit Isotype: IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

Synonyms: SOCS3;ATOD4;CIS3;Cish3;MGC71791;SOCS-3;SSI-3;SSI3;

Immunogen: Recombinant proteinof human SOCS3

**Purification:** Affinity purification

Reactivity: H M R
Applications: WB IHC
Molecular Weight: 25kDa
Swiss-Prot No.: O14543
Gene ID: 9021

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 USA 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.

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