

Rabbit SOCS3 Polyclonal Antibody | anti-SOCS3 antibody

Anti-SOCS3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125532	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

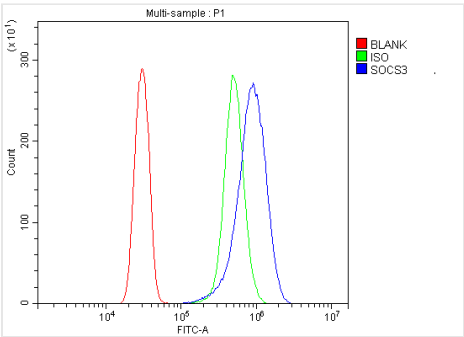
PRODUCT SYNONYMS

SOCS3; Polyclonal Antibody; Anti-SOCS3 Antibody; ATOD4 antibody; CIS 3 antibody; CIS-3 antibody; CIS3 antibody; Cish3 antibody; Cytokine induced SH2 protein 3 antibody; Cytokine-inducible SH2 protein 3 antibody; E2a Pbx1 target gene in fibroblasts 10 antibody; EF 10 antibody; MGC71791 antibody; SOCS 3 antibody; SOCS-3 antibody; Socs3 antibody; SOCS3_HUMAN antibody; SSI 3 antibody; SSI-3 antibody; SSI3 antibody; STAT induced STAT inhibitor 3 antibody; STAT-induced STAT inhibitor 3 antibody; Suppressor of cytokine signaling 3 antibody

; suppressor of cytokine signaling 3; anti-SOCS3 antibody

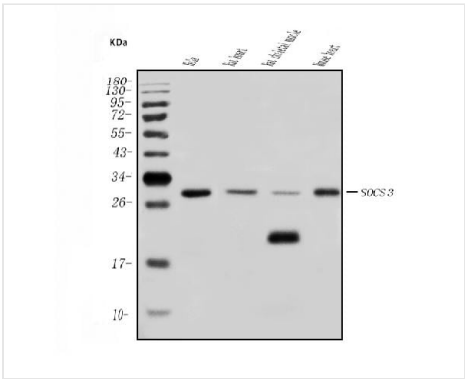
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for SOCS3 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-SOCS3 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human SOCS3 recombinant protein (Position: S13-L225).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of SiHa cells using anti-SOCS3 antibody (AAA125532). Overlay histogram showing SiHa cells stained with AAA125532 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-SOCS3 Antibody (AAA125532, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of SOCS3 using anti-SOCS3 antibody (AAA125532). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HELA whole cell lysates Lane 2: rat heart tissue lysates Lane 3: rat skeletal muscle tissue lysates Lane 4: mouse heart tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SOCS3 antigen affinity purified polyclonal antibody (Catalog # AAA125532) at 0.5 μg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for SOCS3 at approximately 28-30KD. The expected band size for SOCS3 is at 28-30KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SOCS3 antibody	SOCS3 (Suppressor of cytokine signaling 3) is a protein that in humans is encoded by the SOCS3 gene. SOCS3 is transiently expressed by multiple cell lineages within the immune system and functions predominantly as a negative regulator of cytokines that activate the JAK-STAT3 pathway. This gene encodes a member of the STAT-induced SH2 inhibitor (SSI), also known as suppressor of cytokine signaling (SOCS), family. SSI family members are cytokine-inducible negative regulators of cytokine signaling. The expression of this gene is induced by various cytokines, including IL6, IL10, and interferon (IFN)-gamma. The protein encoded by this gene can bind to JAK2 kinase, and inhibit the activity of JAK2 kinase. For signaling of IL-6, Epo, GCSF and Leptin, binding of SOCS3 to the respective cytokine receptor has been found to be crucial for the inhibitory function of SOCS3. Studies of the mouse counterpart of this gene suggested the roles of this gene in the negative regulation of fetal liver hematopoiesis, and placental development.
References	1. Babon, J. J., McManus, E. J., Yao, S., DeSouza, D. P., Mielke, L. A., Sprigg, N. S., Willson, T. A., Hilton, D. J., Nicola, N. A., Baca, M., Nicholson, S. E., Norton, R. S. The structure of SOCS3 reveals the basis of the extended SH2 domain function and identifies an unstructured insertion that regulates stability. Molec. Cell 22: 205-216, 2006. 2. Chen, Z., Laurence, A., Kanno, Y., Pacher-Zavisin, M., Zhu, B. -M., Tato, C., Yoshimura, A., Hennighausen, L., O'Shea, J. J. Selective regulatory function of Socs3 in the formation of IL-17-secreting T cells. Proc. Nat. Acad. Sci. 103: 8137-8142, 2006. 3. Jo, D., Liu, D., Yao, S., Collins, R. D., Hawiger, J. Intracellular protein therapy with SOCS3 inhibits inflammation and apoptosis. Nature Med. 11: 892-898, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	45439352
NCBI GeneID	9021
NCBI Accession #	NP_003946.3
NCBI GenBank Nucleotide #	NM_003955.4
UniProt Accession #	O14543; O14509
Molecular Weight	24,770 Da

NCBI Official Full Name	suppressor of cytokine signaling 3
NCBI Official Synonym Full Names	suppressor of cytokine signaling 3
NCBI Official Symbol	SOCS3
NCBI Official Synonym Symbols	CIS3; SSI3; ATOD4; Cish3; SSI-3; SOCS-3
NCBI Protein Information	suppressor of cytokine signaling 3; STAT-induced STAT inhibitor 3; cytokine-inducible SH2 protein 3
UniProt Protein Name	Suppressor of cytokine signaling 3
UniProt Gene Name	SOCS3
UniProt Synonym Gene Names	CIS3; SSI3; SOCS-3; CIS-3; SSI-3
UniProt Entry Name	SOCS3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/socs3-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125532>