10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SOCS3 Antibody

Catalog # AP51979

Product Information

Application	WB, IF/IC
Primary Accession	O14543
Reactivity	Human, Mouse, Rat, Pig, Chicken, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24770

Additional Information

Gene ID	9021
Other Names	CIS3; SSI3; Suppressor of cytokine signaling 3; SOCS-3; Cytokine-inducible SH2 protein 3; CIS-3; STAT-induced STAT inhibitor 3; SSI-3
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SOCS3. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SOCS3 (HGNC:19391)
Synonyms	CIS3, SSI3
Function	SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS3 is involved in negative regulation of cytokines that signal through the JAK/STAT pathway (PubMed:16459330). Inhibits signal transduction by binding to transmembrane signaling receptors including IL6ST/gp130, LIFR, EPOR, INSR, IL12RB2, CSF3R/G-CSF-R and LEPR. Binding to JAK2 inhibits its kinase activity and regulates IL6 signaling. Suppresses fetal liver erythropoiesis. Regulates onset and maintenance of allergic responses mediated by T-helper type 2 cells (By similarity). Probable substrate recognition component of a SCF-like ECS (Elongin BC-CUL2/5- SOCS-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (PubMed:15601820). Upon OSM stimulation, negatively regulates the JAK-STAT signaling mediated through type II OSM

receptor complex by interacting directly with JAK1 (PubMed:16459330).

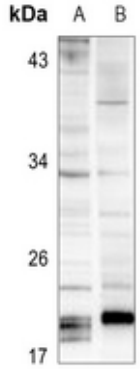
Tissue Location

Widely expressed with high expression in heart, placenta, skeletal muscle, peripheral blood leukocytes, fetal and adult lung, and fetal liver and kidney. Lower levels in thymus

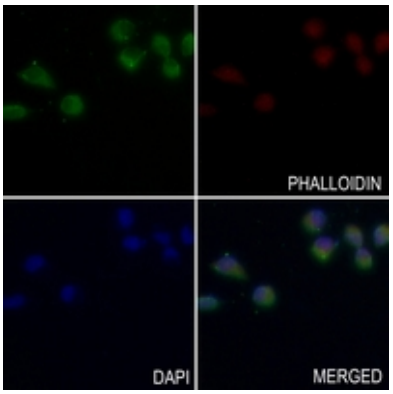
References

Minamoto S.,et al.Biochem. Biophys. Res. Commun. 237:79-83(1997).
Masuhara M.,et al.Biochem. Biophys. Res. Commun. 239:439-446(1997).
Dey B.R.,et al.Biochem. Biophys. Res. Commun. 278:38-43(2000).
Sasaki A.,et al.Genes Cells 4:339-351(1999).
Hoertner M.,et al.Eur. J. Biochem. 269:2516-2526(2002).

Images



Western blot analysis of SOCS3 expression in U87MG (A), HEK293T (B) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 24 kD)



Immunofluorescent analysis of SOCS3 staining in A2780 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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