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

SOCS3 Rabbit pAb

Catalog # AP97100

Product Information

Application	WB
Primary Accession	O14543
Other Accession	O14543
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24770
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SOCS3
Epitope Specificity	161-225/225
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 SH2 domain. Contains 1 SOCS box domain.
SUBUNIT	Interacts with multiple activated proteins of the tyrosine kinase signaling pathway including IGF1 receptor, insulin receptor and JAK2. Binding to JAK2 is mediated through the KIR and SH2 domains to a phosphorylated tyrosine residue within the JAK2 JH1 domain. Binds specific activated tyrosine residues of the leptin, EPO, IL12, GSCF and gp130 receptors. Interaction with CSNK1E stabilizes SOCS3 protein. Component of the probable ECS(SOCS3) E3 ubiquitin-protein ligase complex which contains CUL5, RNF7/RBX2, Elongin BC complex and SOCS3. Interacts with CUL5, RNF7, TCEB1 and TCEB2. Interacts with CUL2.
Post-translational modifications	Phosphorylated on tyrosine residues after stimulation by the cytokines, IL-2, EPO or IGF1.
DISEASE	Genetic variation in the promoter region of SOCS3 may be associated with susceptibility to atopic dermatitis 4 (ATOD4) [MIM:605805]. Atopic dermatitis [MIM:603165], also known as eczema commonly begins in infancy or early childhook and is characterized by ichy and inflamed skin.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Cytokines signal transduction pathway suppressor of cytokine signaling 3 positive cells in the brain are widely distributed, some of the cytoplasm of neurons, nerve fibers, glial cell line. suppressor of cytokine signaling 3 studies in recent years to prove: vascular endothelial cells also showed immune SOCS 3-positive.

Additional Information

Gene ID	9021

Other Names	ATOD4; CIS3; Cish3; SOCS-3; SSI-3; SSI3; SOCS3_HUMAN; SOCS3; Cytokine-inducible SH2 protein 3 (CIS-3); STAT-induced STAT inhibitor 3 (SSI-3); SOCS3_RAT; Cytokine-inducible SH2 protein 3; suppressor of cytokine signaling 3
Dilution	WB=1:500-2000,Flow-Cyt=1ug/Tes
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.