

Goat Anti-SOCS3 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2020a**Specification**

Goat Anti-SOCS3 Antibody - Product Information

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|-------------------|--|
| Application | WB, E |
| Primary Accession | O14543 |
| Other Accession | NP_003946 , 9021 , 12702 (mouse) , 89829 (rat) |
| Reactivity | Human |
| Predicted | Mouse, Rat, Pig, Dog |
| Host | Goat |
| Clonality | Polyclonal |
| Concentration | 100ug/200ul |
| Isotype | IgG |
| Calculated MW | 24770 |

Goat Anti-SOCS3 Antibody - Additional Information**Gene ID** 9021**Other Names**

Suppressor of cytokine signaling 3, SOCS-3, Cytokine-inducible SH2 protein 3, CIS-3, STAT-induced STAT inhibitor 3, SSI-3, SOCS3, CIS3, SSI3

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-SOCS3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SOCS3 Antibody - 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. Inhibits cytokine signal transduction by binding to tyrosine kinase receptors including IL6ST/gp130, LIF, erythropoietin, insulin, IL12, GCSF and leptin receptors. 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).

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

Goat Anti-SOCS3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-SOCS3 Antibody - Images

AF2020a staining (5 µg/ml) of MOLT-4 lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SOCS3 Antibody - Background

This gene encodes a member of the STAT-induced STAT 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. 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.

Goat Anti-SOCS3 Antibody - References

No association of polymorphisms in the suppressor of cytokine signaling (SOCS)-3 with rheumatoid arthritis in the Chinese Han population. Sun LP, et al. Genet Mol Res, 2010 Aug 3. PMID 20690084.
Dengue hemorrhagic fever is associated with polymorphisms in JAK1. Silva LK, et al. Eur J Hum Genet, 2010 Jun 30. PMID 20588308.

Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287.

IFN gamma-dependent SOCS3 expression inhibits IL-6-induced STAT3 phosphorylation and differentially affects IL-6 mediated transcriptional responses in endothelial cells. Bluysen HA, et al. Am J Physiol Cell Physiol, 2010 Aug. PMID 20484656.

Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.