




Product datasheet

Anti-SOCS1 antibody ab9870

★★★★★ [4 Abreviews](#) [31 References](#) [4 Images](#)

Overview

Product name	Anti-SOCS1 antibody
Description	Goat polyclonal to SOCS1
Host species	Goat
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF, ICC, Flow Cyt, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human, Pig Predicted to work with: Cow, Dog 
Immunogen	Synthetic peptide corresponding to Human SOCS1 aa 150-250 (C terminal). Database link: NP_003736.1  Run BLAST with  Run BLAST with
Positive control	Flow Cyt (Intra): HEK293 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 0.5% Tris, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9870 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use a concentration of 10 µg/ml.
ICC/IF		Use at an assay dependent concentration. PubMed: 21628332
ICC		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. PubMed: 23298838 ab37373 - Goat polyclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 2 - 3 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS1 is involved in negative regulation of cytokines that signal through the JAK/STAT3 pathway. Through binding to JAKs, inhibits their kinase activity. In vitro, also suppresses Tec protein-tyrosine activity. Appears to be a major regulator of signaling by interleukin 6 (IL6) and leukemia inhibitory factor (LIF). Regulates interferon-gamma mediated sensory neuron survival (By similarity). Probable substrate recognition component of an ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins. Seems to recognize JAK2.

Tissue specificity

Expressed in all tissues with high expression in spleen, small intestine and peripheral blood leukocytes.

Pathway

Protein modification; protein ubiquitination.

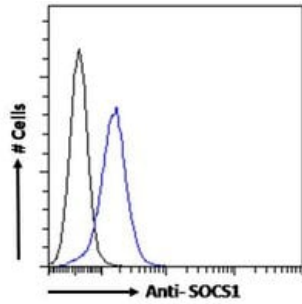
Sequence similarities

Contains 1 SH2 domain.
Contains 1 SOCS box domain.

Domain

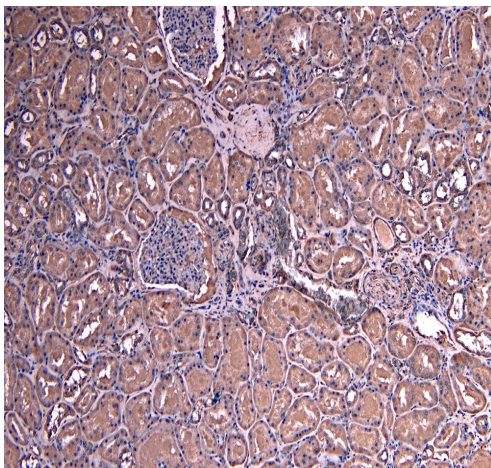
The ESS and SH2 domains are required for JAK phosphotyrosine binding. Further interaction with the KIR domain is necessary for signal and kinase inhibition.
The SOCS box domain mediates the interaction with the Elongin BC complex, an adapter module in different E3 ubiquitin ligase complexes. The Elongin BC complex binding domain is also known as BC-box with the consensus [APST]-L-x(3)-C-x(3)-[AILV] and is part of the SOCS box.

Images



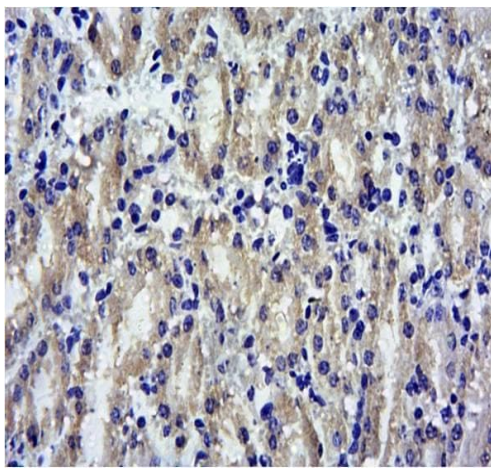
Flow Cytometry (Intracellular) - Anti-SOCS1 antibody (ab9870)

Flow cytometric analysis of HEK293 cells with ab9870 (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



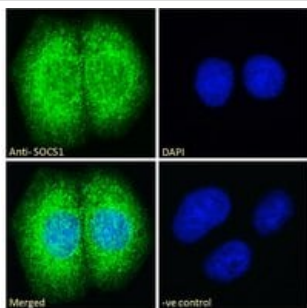
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOCS1 antibody (ab9870)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of paraffin embedded Human Kidney with ab9870 (8 µg/ml). Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOCS1 antibody (ab9870)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of paraffin embedded Mouse Kidney with ab9870 (8 µg/ml). Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



Immunocytochemistry - Anti-SOCS1 antibody
(ab9870)

Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells, permeabilized with 0.15% Triton. Primary incubation with ab9870 (10 µg/ml) followed by Alexa Fluor 488 secondary antibody (2 µg/ml), showing cytoplasmic and nuclear staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 µg/ml) followed by Alexa Fluor 488 secondary antibody (2 µg/ml).

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