

## Product datasheet

# Anti-SOCS3 antibody [SO1] ab14939

★★★★★ 2 Abreviews 2 References 2 图像

### 概述

产品名称	Anti-SOCS3抗体[SO1]
描述	小鼠单克隆抗体[SO1] to SOCS3
宿主	Mouse
经测试应用	适用于: Flow Cyt, WB, ICC/IF, ELISA
种属反应性	与反应: Rat, Human
免疫原	Full length native protein (purified) (Human).

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 15mM Sodium Azide Constituents: PBS, pH 7.4
纯度	Protein A purified
克隆	单克隆
克隆编号	SO1
同种型	IgG2b

### 应用

Our [Abpromise guarantee](#) covers the use of **ab14939** in the following tested applications.

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

应用	Ab评论	说明
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells. <a href="#">ab170192</a> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
WB	★★★★★	Use at an assay dependent concentration. Predicted molecular weight: 27 kDa.

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
ELISA		Use at an assay dependent concentration.

## 靶标

### 功能

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 gp130, LIF, erythropoietin, insulin, IL12, GCSF and leptin receptors. Binding to JAK2 inhibits its kinase activity. Suppresses fetal liver erythropoiesis. Regulates onset and maintenance of allergic responses mediated by T-helper type 2 cells. Regulates IL-6 signaling in vivo (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. Seems to recognize IL6ST.

### 组织特异性

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.

### 通路

Protein modification; protein ubiquitination.

### 疾病相关

Note=There is some evidence that SOCS3 may be a susceptibility gene for atopic dermatitis linked to 17q25. SOCS3 messenger RNA is significantly more highly expressed in skin from patients with atopic dermatitis than in skin from healthy controls. Furthermore, a genetic association between atopic dermatitis and a haplotype in the SOCS3 gene has been found in two independent groups of patients.

### 序列相似性

Contains 1 SH2 domain.  
Contains 1 SOCS box domain.

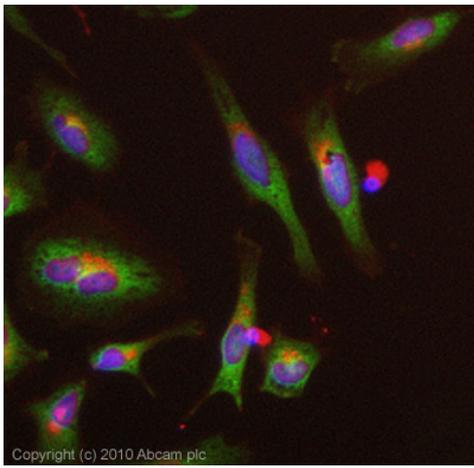
### 结构域

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.

### 翻译后修饰

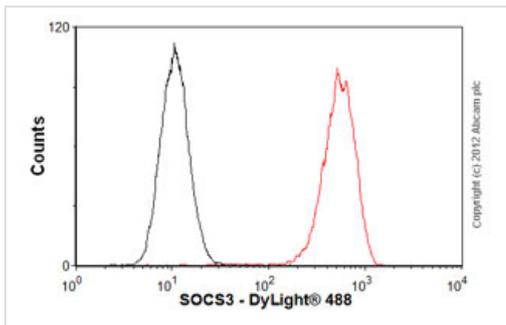
Phosphorylated on tyrosine residues after stimulation by the cytokines, IL-2, EPO or IGF1.

## 图片



Immunocytochemistry/ Immunofluorescence - Anti-SOCS3 antibody [SO1] (ab14939)

ICC/IF image of ab14939 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14939, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Flow Cytometry - Anti-SOCS3 antibody [SO1] (ab14939)

Overlay histogram showing Jurkat cells stained with ab14939 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab14939, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (ab91366, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Jurkat cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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