

For Research Use Only

# SOCS3 Monoclonal antibody

Catalog Number: 66797-1-Ig

Featured Product

17 Publications



## Basic Information

<b>Catalog Number:</b> 66797-1-Ig	<b>GenBank Accession Number:</b> BC060858	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 2000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 9021	<b>CloneNo.:</b> 1G2B12
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O14543	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:250-1:1000 IF-P 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> suppressor of cytokine signaling 3	
<b>Immunogen Catalog Number:</b> AG5386	<b>Calculated MW:</b> 25 kDa	
	<b>Observed MW:</b> 25 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF, IP	<b>WB :</b> Daudi cells, Jurkat cells, HeLa cells, Ramos cells, CTLL-2 cells, pig spleen tissue
<b>Species Specificity:</b> Human, mouse	<b>IHC :</b> human breast cancer tissue, mouse heart tissue
<b>Cited Species:</b> human, mouse, rat	<b>IF-P :</b> mouse heart tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Suppressor of cytokine signaling 3 (SOCS3) is a member of SOCS family that these proteins induced to attenuate cytokine signal transduction in response to signals from a diverse range of cytokines and growth factors. SOCS3 is a negative regulatory protein that inhibits signaling induced by IL-6 via preventing JAK mediated activation of STAT3. However SOCS3 can positively regulate the ERK-MAPK pathway, inhibit the NF- $\kappa$ B pathway (PMID:26429311,25035930). In addition, SOCS3 brings a great impact on immune responses by inhibiting signaling stimulus, such as LPS, type I and type II IFNs, and IL-12. SOCS3 is widely expressed in heart, placenta, skeletal muscle, peripheral blood leukocytes, fetal and adult lung, and fetal liver and kidney (PMID: 22961088). Dysregulation of SOCS3 functions can cause a variety of diseases, including allergy, autoimmune diseases, inflammation and cancer (PMID:26429311).

## Notable Publications

Author	Pubmed ID	Journal	Application
Agueda Ferrer-Donato	34638645	Int J Mol Sci	WB
Goutham Venkata Naga Davuluri	34552935	Front Cell Dev Biol	WB
Zhanghao Huang	35071413	Ann Transl Med	WB

## Storage

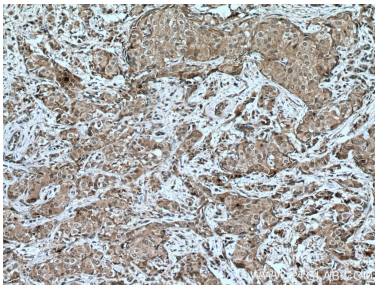
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

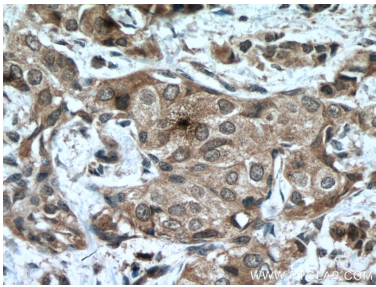
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

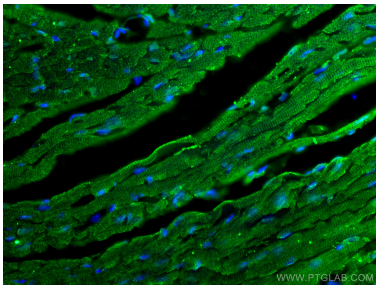
Selected Validation Data



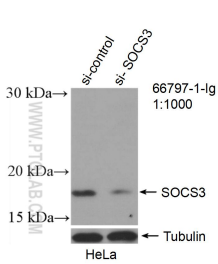
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66797-1-Ig (SOCS3 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



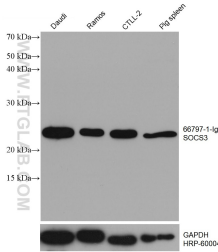
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66797-1-Ig (SOCS3 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using SOCS3 antibody (66797-1-Ig, Clone: 1G2B12 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



WB result of SOCS3 antibody (66797-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SOCS3 transfected HeLa cells.



Various lysates were subjected to SDS PAGE followed by western blot with 66797-1-Ig (SOCS3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.