

Code No. 18395

**Anti-Human
CIS3/SOCS-3 (C005) Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : The Janus family of protein tyrosine kinases (JAKs) and STAT transcription factors regulate cellular processes involved in cell growth, differentiation, and transformation through their association with cytokine receptors. The CIS family of proteins (also referred as the SOCS or SSI family) has been implicated in the regulation of signal transduction by a variety of cytokines.

The cytokine-inducible SH2 protein-3 (CIS3/SOCS-3/SSI-3) has been shown to inhibit the JAK/STAT pathway and act as a negative regulator of fetal liver erythropoiesis. Recently, it is reported that CIS3 regulates the erythropoietin (EPO) receptor (EPOR) signaling in erythroid progenitors and Ba/F3 cells expressing the EPOR (BF-ER). CIS3 binds directly to the EPOR as well as JAK2 and inhibits EPO-dependent proliferation and STAT5 activation.

Antigen : Synthetic peptide of the N-terminal part of Human CIS3/SOCS-3
(it is a part of the common sequence among human, mouse and rat)
(SKFPAAGMSRPLDTSRL)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for western blotting in concentration of 1 - 5 µg /mL.

Specificity : Cross-reactivity has been confirmed with mouse cells.

Reference : 1. Yoshimura A. The CIS family: negative regulators of JAK-STAT signaling. *Cytokine Growth Factor Rev.* 9 (3-4): 197-204, 1998
2. Sasaki A., Yasukawa H., Shouda T., Kitamura T., Dikic I., and Yoshimura A. CIS3/SOCS-3 suppresses erythropoietin (EPO) signaling by binding the EPO receptor and JAK2. *J. Biol. Chem.* 275 (38): 29338-47, 2000
3. Berlato C, Cassatella MA, Kinjyo I, Gatto L, Yoshimura A, Bazzoni F.. Involvement of suppressor of cytokine signaling-3 as a mediator of the inhibitory effects of IL-10 on lipopolysaccharide-induced macrophage activation *J. Immunol.* 168 (12): 6404-6411, 2002
4. Kawaguchi T, Yoshida T, Harada M, Hisamoto T, Nagao Y, Ide T, Taniguchi E, Kumemura H, Hanada S, Maeyama M, Baba S, Koga H, Kumashiro R, Ueno T, Ogata H, Yoshimura A, Sata M. Hepatitis C virus down-regulates insulin receptor substrates 1 and 2 through up-regulation of suppressor of cytokine signaling 3. *Am J Pathol.* 165 (5): 1499-1508, 2004

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Code No. 18395

**Anti-Human
CIS3/SOCS-3 (C005) Rabbit IgG Affinity Purify**Volume : 10 µg

Introduction : The Janus family of protein tyrosine kinases (JAKs) and STAT transcription factors regulate cellular processes involved in cell growth, differentiation, and transformation through their association with cytokine receptors. The CIS family of proteins (also referred as the SOCS or SSI family) has been implicated in the regulation of signal transduction by a variety of cytokines.

The cytokine-inducible SH2 protein-3 (CIS3/SOCS-3/SSI-3) has been shown to inhibit the JAK/STAT pathway and act as a negative regulator of fetal liver erythropoiesis. Recently, it is reported that CIS3 regulates the erythropoietin (EPO) receptor (EPOR) signaling in erythroid progenitors and Ba/F3 cells expressing the EPOR (BF-ER). CIS3 binds directly to the EPOR as well as JAK2 and inhibits EPO-dependent proliferation and STAT5 activation.

Antigen : Synthetic peptide of the N-terminal part of Human CIS3/SOCS-3
(it is a part of the common sequence among human, mouse and rat)
(SKFPAAGMSRPLDTSRLR)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

How to use : 0.1 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for western blotting in concentration of 1 - 5 µg /mL.

Specificity : Cross-reactivity has been confirmed with mouse cells.

Reference : 1. Yoshimura A. The CIS family: negative regulators of JAK-STAT signaling. *Cytokine Growth Factor Rev.* 9 (3-4): 197-204, 1998
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4. Kawaguchi T, Yoshida T, Harada M, Hisamoto T, Nagao Y, Ide T, Taniguchi E, Kumemura H, Hanada S, Maeyama M, Baba S, Koga H, Kumashiro R, Ueno T, Ogata H, Yoshimura A, Sata M. Hepatitis C virus down-regulates insulin receptor substrates 1 and 2 through up-regulation of suppressor of cytokine signaling 3. *Am J Pathol.* 165 (5): 1499-1508, 2004

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