

Code No. 10141

**Anti-Human  
CIS3/SOCS-3 (19A5) Mouse IgG MoAb**Volume : 200 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 C-terminal part of human CIS3/SOCS-3
- Source** : Mouse-Mouse hybridoma  
(X63 - Ag 8.653 × BALB/c mouse spleen cells, supernatant)
- Clone** : 19A5                      **Subclass** : IgG<sub>1</sub>
- Purification** : Affinity purified with antigen peptide
- Form** : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN<sub>3</sub>
- How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to 200 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
- Reference** : 1. Yoshimura, A. et al. A novel cytokine- inducible gene CIS encodes an SH2 containing protein that binds to tyrosine- phosphorylated interleukin 3 and erythropoietin receptors. *EMBO J.* 14: 2816-2826, 1995  
2. Yoshimura, A. et al. The CIS/JAB family: novel negative regulators of JAK signaling pathways. *Leukemia* 12: 1851-1857, 1998.  
3. Yoshimura A. The CIS family: negative regulators of JAK-STAT signaling. *Cytokine Growth Factor Rev.* 9 (3-4): 197-204, 1998  
4. 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  
5. Iwamoto T., Senga T., Naito Y., Matsuda S., Miyake Y., Yoshimura A., and Hamaguchi M. The JAK-inhibitor, JAB/SOCS-1 selectively inhibits cytokine-induced, but not v-Src induced JAK-STAT activation. *Oncogene* 19 (41), 4795-801, 2000

---

*For Non-Clinical Research Use Only*