

Code No.	Name			Volume	Antigen	Application	
						WB	Immunohistochemistry
<b>18381</b>	Anti-Human	<b>JAB/SOCS-1 (J192)</b>	Rabbit IgG Affinity Purify	100 uG	C-terminal	○ (1-5 ug/ml)	—
<b>18395</b>	Anti-Human	<b>CIS/SOCS-3 (C005)</b>	Rabbit IgG Affinity Purify	100 uG	N-terminal	○ (1-5 ug/ml)	—
<b>18391</b>	Anti-Human	<b>CIS/SOCS-3 (C204)</b>	Rabbit IgG Affinity Purify	100 uG	C-terminal	○ (1-5 ug/ml)	○ (5 ug/ml) Microwave pre-treatment (5min X 2, 10mM Citrate Buffer, pH 6.0) is necessary
<b>10141</b>	Anti-Human	<b>CIS/SOCS-3 (19A5)</b>	Mouse IgG MoAb	200 uG	C-terminal	○ (1-5 ug/ml)	—

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.

It is reported that JAB/SOCS-1 is strongly induced by interferon-gamma and forced expression of JAB/SOCS-1 conferred cells interferon resistance. This resistance was caused by inhibition of JAK1 and JAK2 activation in response to IFN gamma. Moreover, recent detailed analysis of JAB/SOCS-1 knockout mice revealed that JAB/SOCS-1 is indeed a "negative feedback regulator" that determine the sensitivity of cells to IFN gamma.

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.

■ **JAB/SOCS-1/ (SSI-1)**  
**JAB:** Jak Binding Protein  
**SOCS:** Suppressor of Cytokine Signaling

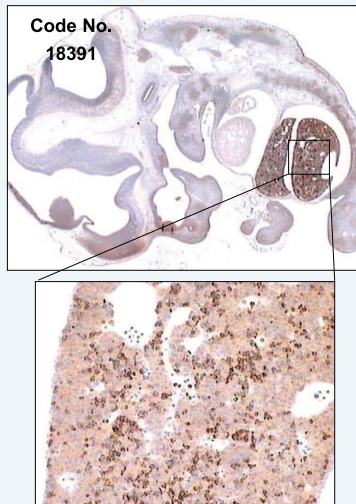
■ **CIS3/SOCS-3/ (SSI-3)**  
**CIS:** Cytokine-inducible SH2 protein  
**SSI:** STAT-induced STAT Inhibitor

### References

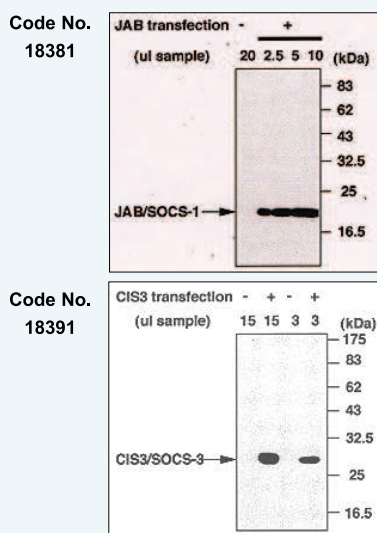
- Yoshimura, A. et al. : A novel cytokine-inducible gene CIS encodes an SH2 containing protein that binds to tyrosine-phosphorylated interleukin 3 and erythropoietin receptors. *EMBO J.*, 14: 2816-2826, 1995
- Yoshimura, A. et al. : The CIS/JAB family: novel negative regulators of JAK signaling pathways. *Leukemia*. 12: 1851-1857, 1998.

### Immunohistochemistry

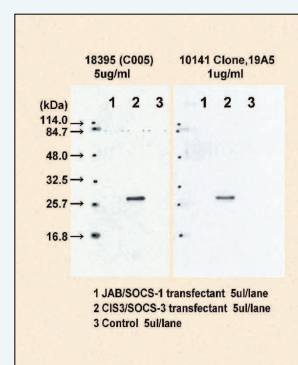
BALB/C Mouse Embryo (9.5 days)



### Western Blotting



Code No. 18395      Code No. 10141



Both JAB transfectant and CIS3 transfectant are kindly provided by Dr. Yoshimura (Kurume University, Japan)

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