

## Recombinant Human SOCS3/CIS3 Protein (His & Trx Tag)

**Catalog No.** PKSH031151

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

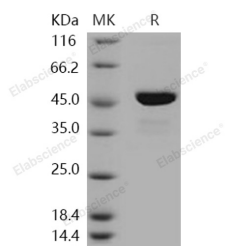
### Description

<b>Synonyms</b>	ATOD4;CIS3;Cish3;SOCS-3;SSI-3;SSI3
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Leu 225
<b>Accession</b>	O14543
<b>Calculated Molecular Weight</b>	41.9 kDa
<b>Observed molecular weight</b>	46 kDa
<b>Tag</b>	N-Trx-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 50mM Tris, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Suppressor of cytokine signaling 3, also known as SOCS-3, Cytokine-inducible SH2 protein 3, CIS-3, STAT-induced STAT inhibitor 3, SOCS3 and CIS3, is a protein which is widely expressed with high expression in heart, placenta,

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skeletal muscle, peripheral blood leukocytes, fetal and adult lung, and fetal liver and kidney. SOCS3 / CIS3 contains oneSH2 domain and oneSOCS box domain. SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS3 / CIS3 is involved in negative regulation of cytokines that signal through the JAK / STAT pathway. SOCS3 / CIS3 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. SOCS3 / CIS3 suppresses fetal liver erythropoiesis. It regulates onset and maintenance of allergic responses mediated by T-helper type 2 cells. SOCS3 / CIS3 regulates IL-6 signaling. SOCS3 / CIS3 interacts with multiple activated proteins of the tyrosine kinase signaling pathway including IGF1 receptor, insulin receptor and JAK2. SOCS3 / CIS3 could be used as a possible therapeutic agent for treating rheumatoid arthritis.