



Recombinant Protein Technical Manual
Recombinant Human SOCS3/CIS3 Protein (His & Trx
Tag)
RPES1992

Product Data:

Product SKU: RPES1992

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: O14543

Protein Information:

Molecular Mass: 41.9 kDa

AP Molecular Mass: 46 kDa

Tag: N-His & Trx

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: ATOD4;CIS3;Cish3;SOCS-3;SSI-3;SSI3

Immunogen Information:

Sequence: Met 1-Leu 225

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, skeletal muscle, peripheral blood leukocytes, fetal and adult lung, and fetal liver and kidney. SOCS3 / CIS3 contains one SH2 domain and one SOCS 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.