

## MATERIAL DATA SHEET

### Recombinant Human SOCS-3

#### Cat. # E3-604

The Suppressor of Cytokine Signaling (SOCS) protein family consists of 8 members including SOCS1-SOCS7, and CIS (cytokine-inducible SH2-containing protein). SOCS proteins are a component of the negative feedback system that attenuates cytokine signaling pathways, acting principally by inhibiting the activation of JAK/STAT proteins. Containing 95% identity with its rat and mouse orthologs, human SOCS3 is a 225 amino acid protein containing an N-terminal kinase inhibitory region, a central SH2 domain, and a C-terminal SOCS domain. The SOCS domain mediates association of SOCS3 with the Elongin B/C adaptor complex of a CUL2/CUL5 ECS (Elongin BC-CUL2/5-SOCS-box) E3 Ubiquitin Ligase. SOCS3 is the probable substrate recognition component of such ligases and may play a role in the ubiquitination of proteins including IL6 Receptor  $\beta$  subunit (gp130), Insulin Receptor, Erythropoietin Receptor, leptin receptors and others.

#### Product Information

<b>Quantity:</b>	25 $\mu$ g
<b>MW:</b>	25 kDa
<b>Source:</b>	<i>E. coli</i> -derived human SOCS-3 protein Accession # O14543
<b>Stock:</b>	X mg/ml (X $\mu$ M) in 50 mM HEPES pH 7.5, 200 mM NaCl, 10% (v/v) Glycerol, 1 mM DTT
<b>Purity:</b>	>90%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

#### Use & Storage

<b>Use:</b>	Typical protein concentration for use in vitro will depend on experimental conditions.
<b>Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>• 60 months from date of receipt, -70 °C as supplied.</li><li>• 3 months, -70 °C under sterile conditions after opening.</li></ul>

## Literature

### References:

1. Kamura, T. et al. (2004) Genes Dev. **18**: 3055
2. Liu, S. et al. (2021) Front Cell Dev Biol DOI: 10.3389/fcell.2021.629932
3. Sasaki A., et al. (1999) Genes Cells **4**:339
4. Yamamoto K., et al. (2003) Biochem. Biophys. Res. Commun. **310**:1188

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