

Recombinant Mouse SOCS3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51162

Size: 10ug, 100ug

Protein Name: Suppressor of cytokine signaling 3 (SOCS-3) (Cytokine-inducible SH2 protein 3) (CIS-3) (Protein EF-10)

Synonym: Socs3, Cis3, Cish3

UniProt ID: O35718

UniProt Link: www.uniprot.org/uniprotkb/O35718/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 225 AA

Molecular Weight: 25 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVTHSKFPAAGMSRPLDTSLRLKTFSSKSEYQLVVNAVRKLQESGFYWSAVTGGEANLLLSAEPAG
TFLIRDSSDQRHFFTL SVKTQSGTKNLRIQCEGGSFSLQSDPRSTQPVPRFDCVLKLVHHYMPPPGT
PSFSLPPTEPSSEVPEQPPAQALPGSTPKRAYYIYSGGEKIPLVLSRPLSSNVATLQHLCRKTVNGHL
DSYEKVTQLPGPIREFLDQYDAPL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Suppressor of cytokine signaling 3 (SOCS-3) (Cytokine-inducible SH2 protein 3) (CIS-3) (Protein EF-10) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS3 is involved in negative regulation of cytokines that signal through the JAK/STAT pathway (By similarity). Inhibits cytokine signal transduction by binding to tyrosine kinase receptors including IL6ST/gp130, LIF, erythropoietin, insulin, IL12, GCSF and leptin receptors (PubMed:10821852, PubMed:12754505, PubMed:9889194). Binding to JAK2 inhibits its kinase activity and regulates IL6 signaling (PubMed:12754505, PubMed:9889194). Suppresses fetal liver erythropoiesis (PubMed:10490101). Regulates onset and maintenance of allergic responses mediated by T-helper type 2 cells (PubMed:12847520). Probable substrate recognition component of a SCF-like ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (By similarity). Upon OSM stimulation, negatively regulates the JAK-STAT signaling mediated through type II OSM receptor complex by interacting directly with JAK1 (By similarity).

Subcellular Localization: N/A

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.