

Recombinant Rat SOCS1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52588

Size: 10ug, 100ug

Protein Name: Suppressor of cytokine signaling 1 (SOCS-1)

Synonym: Socs1

UniProt ID: Q9QX78

UniProt Link: www.uniprot.org/uniprotkb/Q9QX78/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 212 AA

Molecular Weight: 24 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVARNQVAADNAISPASEPRRRPEPSSSSSSSSPAAPRRRPRPCPVVPAPAPGDTHFRTFRSHSDYR
RITRTSALLDACGFYWGPLSVHGAHERLRAEPVGTFLVRDSRQRNCFALSVKMASGPTSIRVHFQ
AGRFHLDGSRETFDCLFELLEHYVAAPRRMLGAPLRQRRVRPLQELCRQRIVAAGVRENLARIPLP
VLRDYLSSFPFQI

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 1 (SOCS-1) 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: Essential negative regulator of type I and type II interferon (IFN) signaling, as well as that of other cytokines, including IL2, IL4, IL6 and leukemia inhibitory factor (LIF). Down-regulates cytokine signaling by inhibiting the JAK/STAT signaling pathway. Acts by binding to JAK proteins and to IFNGR1 and inhibiting their kinase activity. In vitro, suppresses Tec protein-tyrosine activity. Regulates IFN-gamma (IFNG)-mediated sensory neuron survival. Probable substrate recognition component of an ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins.

Subcellular Localization: Nucleus . Cytoplasmic vesicle . Note=Detected in perinuclear cytoplasmic vesicles upon interaction with FGFR3.

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.