

Recombinant Rat SOCS2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52223

Size: 10ug, 100ug

Protein Name: Suppressor of cytokine signaling 2 (SOCS-2) (Cytokine-inducible SH2 protein 2)

Synonym: Socs2, Cish2

UniProt ID: O88582

UniProt Link: www.uniprot.org/uniprotkb/O88582/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 198 AA

Molecular Weight: 22 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTLRCLEPSGNGADRTRSQWG TAGSPEDQSPEAARLAKALRELSQTGWYWGSMTVNEAKEKLKE
APEGTFILRDSSHSDYLLTISVKTSAGPTNLRIEYQDGKFRLD SIICVKSKLKQFDSVVHLIDYYVQMCK
DKRTGPEAPRNGTVHLYLTKPLYTSAPTLQHFCRLSINKCTGTIRGLPLPTRLKDYLEEYKFQV

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 2 (SOCS-2) (Cytokine-inducible SH2 protein 2) 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: Substrate-recognition component of a cullin-5-RING E3 ubiquitin-protein ligase complex (ECS complex, also named CRL5 complex), which mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as EPOR and GHR. Specifically recognizes and binds phosphorylated proteins via its SH2 domain, promoting their ubiquitination. The ECS(SOCS2) complex acts as a key regulator of growth hormone receptor (GHR) levels by mediating ubiquitination and degradation of GHR, following GHR phosphorylation by JAK2. The ECS(SOCS2) also catalyzes ubiquitination and degradation of JAK2-phosphorylated EPOR.

Subcellular Localization: Cytoplasm .

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.