

SOCS-2 Polyclonal Antibody

Catalog # AP72546

Product Information

Application WB Primary Accession 014508

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW22172

Additional Information

Gene ID 8835

Other Names SOCS2; CIS2; SSI2; STATI2; Suppressor of cytokine signaling 2; SOCS-2;

Cytokine-inducible SH2 protein 2; CIS-2; STAT-induced STAT inhibitor 2; SSI-2

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name SOCS2 {ECO:0000303 | PubMed:10512686,

ECO:0000312 | HGNC:HGNC:19382}

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 (PubMed: 11781573, PubMed: 21980433,

PubMed:<u>25505247</u>, PubMed:<u>31182716</u>, PubMed:<u>34857742</u>). Specifically recognizes and binds phosphorylated proteins via its SH2 domain, promoting

their ubiquitination (PubMed: 21980433, PubMed: 25505247,

PubMed:<u>31182716</u>, PubMed:<u>34857742</u>, PubMed:<u>37816714</u>). 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 (PubMed:<u>21980433</u>, PubMed:<u>25505247</u>, PubMed:<u>34857742</u>). The ECS(SOCS2) also catalyzes ubiquitination and

degradation of JAK2-phosphorylated EPOR (PubMed: 11781573).

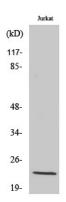
Cellular Location Cytoplasm.

High expression in heart, placenta, lung, kidney and prostate. Predominantly expressed in pulmonary epithelia cells, specifically type II pneumocytes.

Background

SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. SOCS2 appears to be a negative regulator in the growth hormone/IGF1 signaling pathway. 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.

Images



Western Blot analysis of various cells using SOCS-2 Polyclonal Antibody diluted at 1 : 1000

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