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SOCS-2 Polyclonal Antibody

Catalog # AP74060

Product Information

Application	WB, IHC-P
Primary Accession	O14508
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22172

Additional Information

Gene ID	8835
Other Names	Suppressor of cytokine signaling 2 (SOCS-2) (Cytokine-inducible SH2 protein 2) (CIS-2) (STAT-induced STAT inhibitor 2) (SSI-2)
Dilution	WB~~WB 1:500-2000,IHC-p 1:500-200, ELISA 1:10000-20000 IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

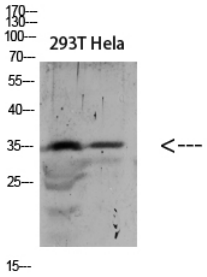
Name	SOCS2 {ECO:0000303|PubMed:10512686, ECO:0000312|HGNC:HGNC:19382}
Function	Substrate-recognition component of a cullin-5-RING E3 ubiquitin-protein ligase complex (ECS complex, also named CRL5 complex), which mediates the ubiquitination and subsequent proteasomal degradation of target proteins, such as EPOR and GHR (PubMed:11781573, PubMed:21980433, PubMed:25505247, PubMed:31182716, PubMed:34857742). Specifically recognizes and binds phosphorylated proteins via its SH2 domain, promoting their ubiquitination (PubMed:21980433, PubMed:25505247, PubMed:31182716, PubMed:34857742, PubMed:37816714). 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:21980433, PubMed:25505247, PubMed:34857742). The ECS(SOCS2) also catalyzes ubiquitination and degradation of JAK2-phosphorylated EPOR (PubMed:11781573).
Cellular Location	Cytoplasm.
Tissue Location	High expression in heart, placenta, lung, kidney and prostate. Predominantly

expressed in pulmonary epithelia cells, specifically type II pneumocytes.

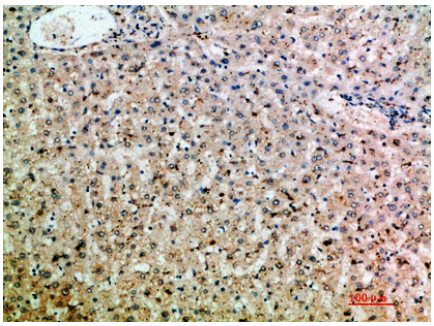
Background

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 Hela lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:200