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Anti-SOCS2 Picoband Antibody

Catalog # ABO12091

Product Information

Application	WB
Primary Accession	O14508
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Suppressor of cytokine signaling 2(SOCS2) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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, SOCS2, CIS2, SSI2, STATI2
Calculated MW	22172
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Tissue Specificity	High expression in heart, placenta, lung, kidney and prostate.
Source	Eukaryota
Protein Name	Suppressor of cytokine signaling 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human SOCS2 recombinant protein (Position: R96-V198). Human SOCS2 shares 96.1% and 95.1% amino acid (aa) sequence identity with mouse and rat SOCS2, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 1 SH2 domain.

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

Suppressor of cytokine signaling 2 is a protein that in humans is encoded by the SOCS2 gene. This gene encodes a member of the STAT-induced STAT inhibitor (SSI), also known as suppressor of cytokine signalling (SOCS), family. SSI family members are cytokine-inducible negative regulators of cytokine signaling. The expression of this gene can be induced by a subset of cytokines, including erythropoietin, GM-CSF, IL10 and interferon-gamma (IFN-gamma). The protein encoded by this gene is found to interact with the cytoplasmic domain of insulin-like growth factor 1 receptor (IGF1R), and thus is thought to be involved in the regulation of IGF1R mediated cell signaling. By cytogenetic and radiation hybrid mapping, Yandava et al. (1999) mapped the SOCS2 gene to chromosome 12q21.3-q23.

Images



Anti- Picoband antibody, PB, Western blottingAll lanes: Anti SOCS2 (ABO12091) at 0.5ug/mlLane 1: PC-12 Whole Cell Lysate at 40ugLane 2: SW620 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 22KDObserved bind size: 22KD

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