

SOCS7 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17111b

Specification

SOCS7 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O14512</u> <u>O8VHO2</u>, <u>NP_055413.1</u> Human Mouse Rabbit Polyclonal Rabbit IgG 62969 458-486

SOCS7 Antibody (C-term) - Additional Information

Gene ID 30837

Other Names

Suppressor of cytokine signaling 7, SOCS-7, Nck, Ash and phospholipase C gamma-binding protein, Nck-associated protein 4, NAP-4, SOCS7, NAP4, SOCS6

Target/Specificity

This SOCS7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 458-486 amino acids from the C-terminal region of human SOCS7.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SOCS7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SOCS7 Antibody (C-term) - Protein Information

Name SOCS7 {ECO:0000303|PubMed:16127460, ECO:0000312|HGNC:HGNC:29846}



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 DAB1 and IRS1 (PubMed:<u>16127460</u>). Specifically recognizes and binds phosphorylated proteins via its SH2 domain, promoting their ubiquitination (By similarity). The ECS(SOCS7) complex acts as a key regulator of reelin signaling by mediating ubiquitination and degradation of phosphorylated DAB1 in the cortical plate of the developing cerebral cortex, thereby regulating neuron positioning during cortex development (By similarity). Functions in insulin signaling and glucose homeostasis through IRS1 ubiquitination and subsequent proteasomal degradation (PubMed:<u>16127460</u>). Also inhibits prolactin, growth hormone and leptin signaling by preventing STAT3 and STAT5 activation, sequestering them in the cytoplasm and reducing their binding to DNA (PubMed:<u>15677474</u>).

Cellular Location

Cytoplasm. Nucleus Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Mostly cytoplasmic, but shuttles between the cytoplasm and the nucleus (PubMed:17803907). Rapidly relocalizes to the nucleus after UV irradiation (PubMed:17803907) Cytoplasmic location depends upon SEPT7 presence (PubMed:17803907)

Tissue Location

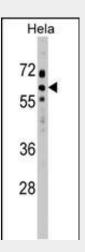
Expressed in brain and leukocytes (PubMed:9344857). Also in fetal lung fibroblasts and fetal brain (PubMed:9344857)

SOCS7 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SOCS7 Antibody (C-term) - Images



SOCS7 Antibody (C-term) (Cat. #AP17111b) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the SOCS7 antibody detected the SOCS7 protein (arrow).



SOCS7 Antibody (C-term) - Background

Regulates signaling cascades probably through protein ubiquitination and/or sequestration. Functions in insulin signaling and glucose homeostasis through IRS1 ubiquitination and subsequent proteasomal degradation. Inhibits also prolactin, growth hormone and leptin signaling by preventing STAT3 and STAT5 activation, sequestering them in the cytoplasm and reducing their binding to DNA. May be a substrate recognition component of a SCF-like E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (By similarity).

SOCS7 Antibody (C-term) - References

Pazienza, V., et al. J. Gen. Virol. 91 (PT 7), 1678-1686 (2010) : Sasi, W., et al. BMC Cancer 10, 178 (2010) : Kremer, B.E., et al. Cell 130(5):837-850(2007) Zody, M.C., et al. Nature 440(7087):1045-1049(2006) Banks, A.S., et al. J. Clin. Invest. 115(9):2462-2471(2005)