

SOCS7 Antibody

Rabbit mAb Catalog # AP93101

Specification

SOCS7 Antibody - Product Information

Application WB, IHC
Primary Accession O14512
Clonality Monoclonal
Other Names

Ash and phospholipase C gamma-binding protein; NAP4; Nck; Nck Ash and phospholipase C binding protein; Nck associated protein 4; NCKAP4; SH2 domain containing SOCS box protein; SOCS4; SOCS6; Socs7; Suppressor of cytokine signaling 7;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 62969 Da

SOCS7 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

SOCS7

Description 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

SOCS7 Antibody - 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:16127460). 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:16127460). 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:15677474).

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

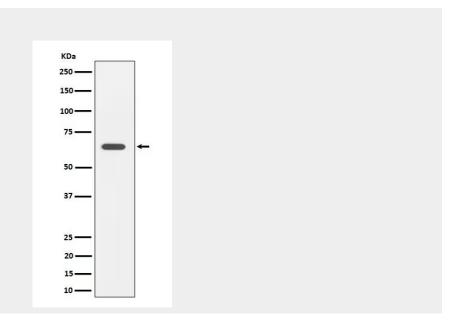
Expressed in brain and leukocytes (PubMed:9344857). Also in fetal lung fibroblasts and fetal brain (PubMed:9344857)

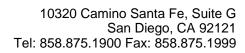
SOCS7 Antibody - Protocols

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

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

SOCS7 Antibody - Images







Western blot analysis of SOCS7 expression in HeLa cell lysate.