

SOCS7 Antibody

Rabbit mAb

Catalog # AP93101

Product Information

Application	WB, IHC
Primary Accession	O14512
Reactivity	Human
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

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200
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.

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](#)).

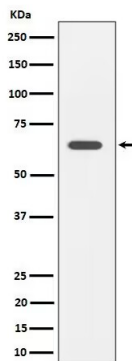
Cellular Location

Cytoplasm. Nucleus Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Mostly cytoplasmic, but shuttles between the cytoplasm and the nucleus (PubMed:17803907). Rapidly relocates 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)

Images



Western blot analysis of SOCS7 expression in HeLa cell lysate.

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