10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-SOCS7 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2021a

Specification

Goat Anti-SOCS7 Antibody - Product Information

Application	**WB**
Primary Accession	O14512
Other Accession	NP_055413, 30837
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**62969**

Goat Anti-SOCS7 Antibody - 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-SOCS7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-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)

Goat Anti-SOCS7 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-SOCS7 Antibody - Images

AF2021a (1 µg/ml) staining of Daudi lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-SOCS7 Antibody - References

Higher expression levels of SOCS 1,3,4,7 are associated with earlier tumour stage and better clinical outcome in human breast cancer. Sasi W, et al. BMC Cancer, 2010 Apr 30. PMID 20433750.
Hepatitis C virus core protein genotype 3a increases SOCS-7 expression through PPAR-{gamma} in

Huh-7 cells. Pazienza V, et al. J Gen Virol, 2010 Jul. PMID 20357037.
Septins regulate actin organization and cell-cycle arrest through nuclear accumulation of NCK mediated by SOCS7. Kremer BE, et al. Cell, 2007 Sep 7. PMID 17803907.
DNA sequence of human chromosome 17 and analysis of rearrangement in the human lineage. Zody MC, et al. Nature, 2006 Apr 20. PMID 16625196.
Deletion of SOCS7 leads to enhanced insulin action and enlarged islets of Langerhans. Banks AS, et al. J Clin Invest, 2005 Sep. PMID 16127460.