



Rabbit Anti-SOCS7 antibody

SL20151R

Product Name:	SOCS7
Chinese Name:	Signal transduction和转录激活因子7抗体
Alias:	NAP 4; NAP 4 Fragment; NAP4; Nck Ash and phospholipase C binding protein; Nck Ash and phospholipase C gamma binding protein; Nck associated protein 4; NCKAP4; SH2 domain containing SOCS box protein; SOCS 7; SOCS4; SOCS6; Suppressor of cytokine signaling 7;SOCS7 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	63kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SOCS7:171-270/581
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The eight members of the recently identified Suppressor of Cytokines Signaling (SOCS) family are SOCS1, SOCS2, SOCS3, SOCS4, SOCS5, SOCS6, SOCS7, and CIS. Structurally the SOCS proteins are composed of an N- terminal region of variable length and amino acid composition, a central SH2 domain, and a C-terminal motif called the

SOCS box. The SOCS proteins appear to form part of a classical negative feedback loop that regulates cytokine signal transduction. Transcription of each of the SOCS genes occurs rapidly in vitro and in vivo in response to cytokines, and once produced, the various members of the SOCS family appear to inhibit signaling in different ways. SOCS1 and SOCS6 interact with the insulin receptor (IR) when expressed in human hepatoma cells (HepG2) or in rat hepatoma cells overexpressing human IR. SOCS1 and SOCS6 inhibit insulin-dependent activation of ERK1/2 and protein kinase B in vivo and IR-directed phosphorylation of IRS1 in vitro. These results suggest that SOCS proteins may be inhibitors of IR signalling and could mediate cytokine-induced insulin resistance and contribute to the pathogenesis of type II diabetes. SOCS6 and SOCS7 are expressed ubiquitously in murine tissues and SOCS6 knockout mice are growth retarded.

Function:

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.

Subunit:

Interacts with phosphorylated IRS4 and PIK3R1 (By similarity). Interacts, via the third proline-rich region, with the second SH3 domain of the adapter protein NCK1. Also interacts with GRB2, INSR, IRS1, PLCG1, SORBS3/vinexin, and phosphorylated STAT3 and STAT5. Interacts with SEPT6.

Subcellular Location:

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

Tissue Specificity:

Expressed in brain and leukocytes. Also in fetal lung fibroblasts and fetal brain.

Similarity:

Contains 1 SH2 domain.
Contains 1 SOCS box domain.

SWISS:

O14512

Gene ID:

30837

Database links:

[Entrez Gene: 30837](#) Human

[Oimim: 608788](#) Human

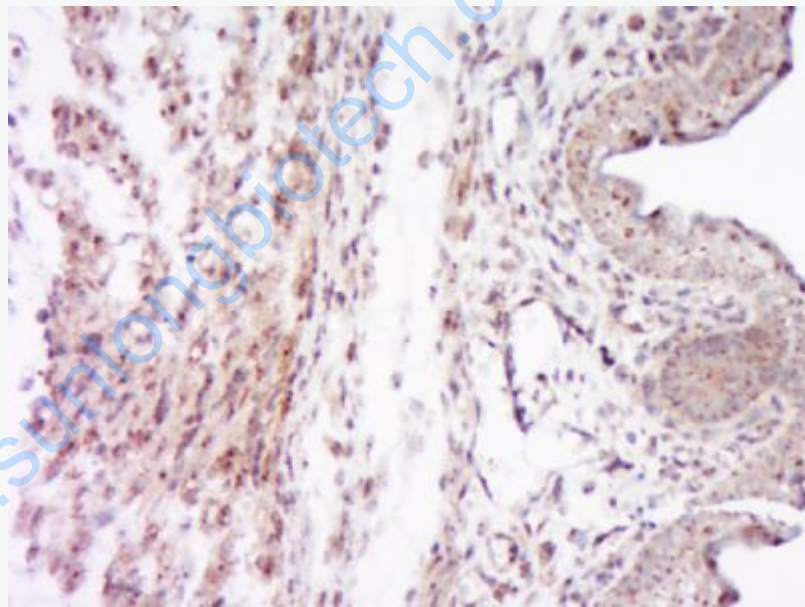
[SwissProt: O14512](#) Human

[SwissProt: Q8WXH5](#) Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Tissue/cell: Mouse embryo tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-SOCS7 Polyclonal Antibody, Unconjugated(SL20151R) 1:500,

	overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining
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