

CSN1 (K-19): sc-47854

BACKGROUND

The COP9 signalosome (CSN) complex is involved in several different developmental and cellular processes. The complex is made up of several widely expressed proteins: CSN1 (COPS1), CSN2 (COPS2), CSN3 (COPS3), CSN4 (COPS4), CSN5 (COPS5), CSN6 (COPS6), CSN7a (COPS7, COPS7a) or CSN7b (COPS7b) and CSN8 (COPS8). The CSN complex acts as a regulator for the ubiquitin conjugation pathway by mediating the deneddylation of the SCF-type E3 ligase complexes, which leads to a decrease in ubiquitin ligase activity of SCF-complexes. It is also involved in the phosphorylation of p53, c-Jun, IκBα and IRF-8, as well as the CSN-dependent phosphorylation of p53. c-Jun protects and promotes degradation by the Ubl system.

REFERENCES

1. Bech-Otschir, D., et al. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. *EMBO J.* 20: 1630-1639.
2. Tsuge, T., et al. 2001. The subunit 1 of the COP9 signalosome suppresses gene expression through its N-terminal domain and incorporates into the complex through the PCI domain. *J. Mol. Biol.* 305: 1-9.

CHROMOSOMAL LOCATION

Genetic locus: GPS1 (human) mapping to 17q25.3; Gps1 (mouse) mapping to 11 E2.

SOURCE

CSN1 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CSN1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47854 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CSN1 (K-19) is recommended for detection of CSN1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CSN1 (K-19) is also recommended for detection of CSN1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for CSN1 siRNA (h): sc-60455, CSN1 siRNA (m): sc-60456, CSN1 shRNA Plasmid (h): sc-60455-SH, CSN1 shRNA Plasmid (m): sc-60456-SH, CSN1 shRNA (h) Lentiviral Particles: sc-60455-V and CSN1 shRNA (m) Lentiviral Particles: sc-60456-V.

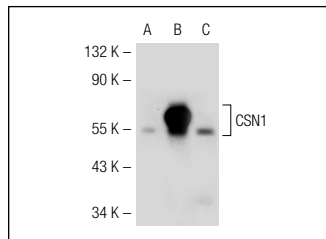
Molecular Weight of CSN1: 60 kDa.

Positive Controls: CSN1 (h): 293T Lysate: sc-110484, CSN1 (m): 293T Lysate: sc-125175 or K-562 whole cell lysate: sc-2203.

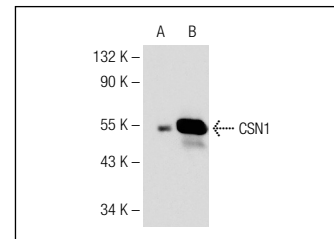
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CSN1 (K-19): sc-47854. Western blot analysis of CSN1 expression in non-transfected 293T: sc-117752 (A), mouse CSN1 transfected 293T: sc-125175 (B) and K-562 (C) whole cell lysates.



CSN1 (K-19): sc-47854. Western blot analysis of CSN1 expression in non-transfected: sc-117752 (A) and human CSN1 transfected: sc-110484 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Welteke, V., et al. 2009. COP9 signalosome controls the Carma1-Bcl10-Malt1 complex upon T-cell stimulation. *EMBO Rep.* 10: 642-648.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **CSN1 (E-4): sc-514086** or **CSN1 (D-4): sc-365617**, our highly recommended monoclonal alternatives to CSN1 (K-19).