SANTA CRUZ BIOTECHNOLOGY, INC.

CSN1 (H-41): sc-292637



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 (COP6), CSN7a (COPS7, COPS7a) or CSNS7b (COP7b) and CSNS8 (COP8). 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-comlpexes. It is also involved in the phosphorylation of p53, c-Jun, $l\kappa B-\alpha$ and IRF-8, as well as CSN-dependent phosphorylation of p53. c-Jun protects and promotes degradation by the Ubl system.

REFERENCES

- Bech-Otschir, D., Kraft, R., Huang, X., Henklein, P., Kapelari, B., Pollmann, C. and Dubiel, W. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. EMBO J. 20: 1630-1639.
- Lyapina, S., Cope, G., Shevchenko, A., Serino, G., Tsuge, T., Zhou, C., Wolf, D.A., Wei, N., Shevchenko, A. and Deshaies, R.J. 2001. Promotion of NEDD-CUL1 conjugate cleavage by COP9 signalosome. Science 292: 1382-1385.

CHROMOSOMAL LOCATION

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

SOURCE

CSN1 (H-41) is a rabbit polyclonal antibody raised against amino acids 392-432 mapping near the C-terminus of CSN1 of human origin.

PRODUCT

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

APPLICATIONS

CSN1 (H-41) 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 μ g per 100-500 μ g 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 (H-41) 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.

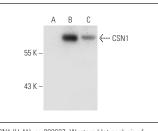
Molecular Weight of CSN1: 60 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, MCF7 whole cell lysate: sc-2206 or CSN1 (m): 293T Lysate: sc-125175.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



CSN1 (H-41): sc-292637. Western blot analysis of CSN1 expression in non-transfected 2931: sc-117752 (A), mouse CSN1 transfected 2937: sc-125175 (B) and HEL 92.1.7 (C) whole cell lysates.

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.

MONOS Satisfation Guaranteed

Try **CSN1 (E-4): sc-514086** or **CSN1 (D-4): sc-365617**, our highly recommended monoclonal alternatives to CSN1 (H-41).