

CSN6 (H-3): sc-137122

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 CSN7b (COP7b) and CSN8 (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-complexes. It is also involved in the phosphorylation of p53, c-Jun, I κ B α and IRF-8, as well as CSN-dependent phosphorylation of p53, and c-Jun protects and promotes degradation by the Ubl system.

REFERENCES

- Seeger, M., et al. 1998. A novel protein complex involved in signal transduction possessing similarities to 26S proteasome subunits. *FASEB J.* 12: 469-478.
- Bech-Otschir, D., et al. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. *EMBO J.* 20: 1630-1639.
- Hoareau Alves, K., et al. 2002. Association of the mammalian proto-oncoprotein Int-6 with the three protein complexes eIF3, COP9 signalosome and 26S proteasome. *FEBS Lett.* 527: 15-21.
- Groisman, R., et al. 2003. The ubiquitin ligase activity in the DDB2 and CSA complexes is differentially regulated by the COP9 signalosome in response to DNA damage. *Cell* 113: 357-367.
- Uhle, S., et al. 2003. Protein kinase CK2 and protein kinase D are associated with the COP9 signalosome. *EMBO J.* 22: 1302-1312.
- Gemmill, R.M., et al. 2005. Growth suppression induced by the TRC8 hereditary kidney cancer gene is dependent upon JAB1/CSN5. *Oncogene* 24: 3503-3511.

CHROMOSOMAL LOCATION

Genetic locus: COPS6 (human) mapping to 7q22.1; Cops6 (mouse) mapping to 5 G2.

SOURCE

CSN6 (H-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 231-268 near the C-terminus of CSN6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137122 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

CSN6 (H-3) is recommended for detection of CSN6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

CSN6 (H-3) is also recommended for detection of CSN6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CSN6 siRNA (h): sc-60461, CSN6 siRNA (m): sc-60462, CSN6 shRNA Plasmid (h): sc-60461-SH, CSN6 shRNA Plasmid (m): sc-60462-SH, CSN6 shRNA (h) Lentiviral Particles: sc-60461-V and CSN6 shRNA (m) Lentiviral Particles: sc-60462-V.

Molecular Weight of CSN6: 34 kDa.

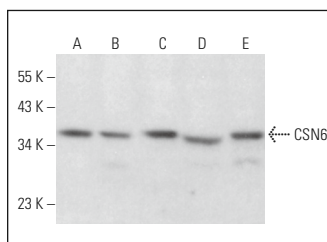
Positive Controls: HeLa whole cell lysate: sc-2200, 3T3-L1 cell lysate: sc-2243 or rat brain extract: sc-2392.

RECOMMENDED SUPPORT REAGENTS

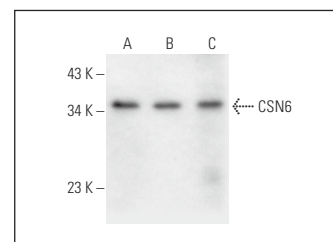
To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CSN6 (H-3): sc-137122. Western blot analysis of CSN6 expression in C6 (A), 3T3-L1 (B), IMR-32 (C), T98G (D) and SK-BR-3 (E) whole cell lysates.



CSN6 (H-3): sc-137122. Western blot analysis of CSN6 expression in HeLa (A) and 3T3-L1 (B) whole cell lysates and rat brain tissue extract (C).

SELECT PRODUCT CITATIONS

- Stotland, A., et al. 2012. Purification of the COP9 signalosome complex and binding partners from human T cells. *OMICS* 16: 312-319.

RESEARCH USE

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