SANTA CRUZ BIOTECHNOLOGY, INC.

CSN8 (H-11): sc-398886

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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), 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, IκB-α and IRF-8, as well as CSN-dependent phosphorylation of p53, and c-Jun protects and promotes degradation by the Ubl system.

REFERENCES

1. Seeger, M., et al. 1998. A novel protein complex involved in signal transduction possessing similarities to 26S proteasome subunits. FASEB J. 12: 469-478.
2. Yahalom, A., et al. 2001. *Arabidopsis* eIF3e (INT-6) associates with both eIF3c and the COP9 signalosome subunit CSN7. J. Biol. Chem. 276: 334-340.
3. Lyapina, S., et al. 2001. Promotion of NEDD-CUL1 conjugate cleavage by COP9 signalosome. Science 292: 1382-1385.
4. Bech-Otschir, D., et al. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. EMBO J. 20: 1630-1639.
5. Uhle, S., et al. 2003. Protein kinase CK2 and protein kinase D are associated with the COP9 signalosome. EMBO J. 22: 1302-1312.
6. 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.
7. Lykke-Andersen, K. and Wei, N. 2003. Gene structure and embryonic expression of mouse COP9 signalosome subunit 8. Gene 321: 65-72.

CHROMOSOMAL LOCATION

Genetic locus: COPS8 (human) mapping to 2q37.3; Cops8 (mouse) mapping to 1 D.

SOURCE

CSN8 (H-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 159-184 near the C-terminus of CSN8 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 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-398886 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

CSN8 (H-11) is recommended for detection of CSN8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for CSN8 siRNA (h): sc-60467, CSN8 siRNA (m): sc-60468, CSN8 shRNA Plasmid (h): sc-60467-SH, CSN8 shRNA Plasmid (m): sc-60468-SH, CSN8 shRNA (h) Lentiviral Particles: sc-60467-V and CSN8 shRNA (m) Lentiviral Particles: sc-60468-V.

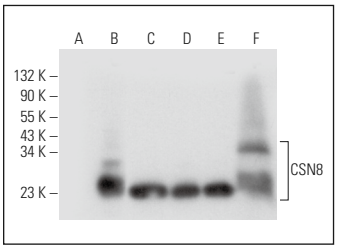
Molecular Weight of CSN8: 22 kDa.

Positive Controls: CSN8 (m2): 293T Lysate: sc-119487, NIH/3T3 whole cell lysate: sc-2210 or F9 cell lysate: sc-2245.

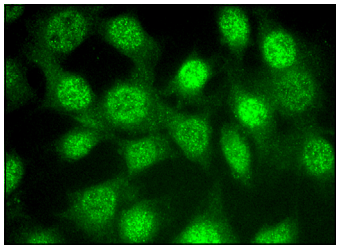
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



CSN8 (H-11): sc-398886. Western blot analysis of CSN8 expression in non-transfected 293T: sc-117752 (**A**), mouse CSN8 transfected 293T: sc-119487 (**B**), NIH/3T3 (**C**), F9 (**D**) and 3T3-L1 (**E**) whole cell lysates and mouse embryo tissue extract (**F**).



CSN8 (H-11): sc-398886. Immunofluorescence staining of formalin-fixed NIH/3T3 cells showing nuclear localization.

STORAGE

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

PROTOCOLS

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