

# CSN8 (C-9): sc-514088

## 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

- Seeger, M., et al. 1998. A novel protein complex involved in signal transduction possessing similarities to 26S proteasome subunits. *FASEB J.* 12: 469-478.
- 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.
- Lyapina, S., et al. 2001. Promotion of NEDD-CUL1 conjugate cleavage by COP9 signalosome. *Science* 292: 1382-1385.
- Bech-Otschir, D., et al. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. *EMBO J.* 20: 1630-1639.
- Uhle, S., et al. 2003. Protein kinase CK2 and protein kinase D are associated with the COP9 signalosome. *EMBO J.* 22: 1302-1312.

## CHROMOSOMAL LOCATION

Genetic locus: Cops8 (mouse) mapping to 1 D.

## SOURCE

CSN8 (C-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 161-186 near the C-terminus of CSN8 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CSN8 (C-9) is available conjugated to agarose (sc-514088 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514088 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514088 PE), fluorescein (sc-514088 FITC), Alexa Fluor® 488 (sc-514088 AF488), Alexa Fluor® 546 (sc-514088 AF546), Alexa Fluor® 594 (sc-514088 AF594) or Alexa Fluor® 647 (sc-514088 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514088 AF680) or Alexa Fluor® 790 (sc-514088 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514088 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## APPLICATIONS

CSN8 (C-9) is recommended for detection of CSN8 of mouse and rat 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 (m): sc-60468, CSN8 shRNA Plasmid (m): sc-60468-SH and CSN8 shRNA (m) Lentiviral Particles: sc-60468-V.

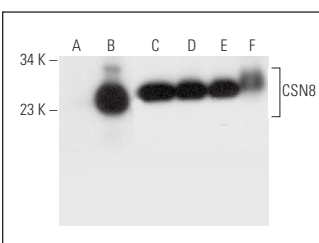
Molecular Weight of CSN8: 22 kDa.

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

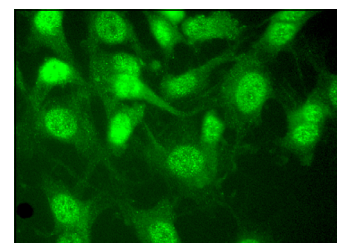
## RECOMMENDED SUPPORT REAGENTS

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 (C-9): sc-514088. 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 (C-9): sc-514088. Immunofluorescence staining of formalin-fixed NIH/3T3 cells showing nuclear and cytoplasmic localization.

## 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](http://www.scbt.com) for detailed protocols and support products.