

CSN8 (m2): 293T Lysate: sc-119487

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, 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., Kraft, R., Ferrell, K., Bech-Otschir, D., Dumdey, R., Schade, R., Gordon, C., Naumann, M. and Dubiel, W. 1998. A novel protein complex involved in signal transduction possessing similarities to 26S Proteasome subunits. *FASEB J.* 12: 469-478.
- Yahalom, A., Kim, T.H., Winter, E., Karniol, B., von Arnim, A.G. and Chamovitz, D.A. 2001. *Arabidopsis* eIF3e (Int-6) associates with both eIF3c and the COP9 signalosome subunit CSN7. *J. Biol. Chem.* 276: 334-340.
- 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-CUL-1 conjugate cleavage by COP9 signalosome. *Science* 292: 1382-1385.
- 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.
- Uhle, S., Medalia, O., Waldron, R., Dumdey, R., Henklein, P., Bech-Otschir, D., Huang, X., Berse, M., Sperling, J., Schade, R. and Dubiel, W. 2003. Protein kinase CK2 and protein kinase D are associated with the COP9 signalosome. *EMBO J.* 22: 1302-1312.
- Groisman, R., Polanowska, J., Kuraoka, I., Sawada, J., Saijo, M., Drapkin, R., Kisselev, A.F., Tanaka, K. and Nakatani, Y. 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.
- Lykke-Andersen, K. and Wei, N. 2003. Gene structure and embryonic expression of mouse COP9 signalosome subunit 8 (CSN8). *Gene* 321: 65-72.

CHROMOSOMAL LOCATION

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

PRODUCT

CSN8 (m2): 293T Lysate represents a lysate of mouse CSN8 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CSN8 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CSN8 antibodies. Recommended use: 10-20 μ l per lane.

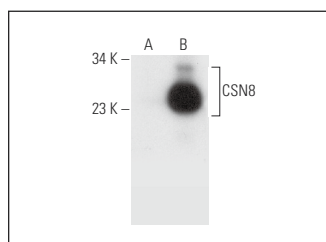
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CSN8 (C-9): sc-514088 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse CSN8 expression in CSN8 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) 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.

DATA



CSN8 (C-9): sc-514088. Western blot analysis of CSN8 expression in non-transfected: sc-117752 (A) and mouse CSN8 transfected: sc-119487 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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