

CSN8 (F-8): sc-393482

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.
- 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 (human) mapping to 2q37.3; Cops8 (mouse) mapping to 1 D.

SOURCE

CSN8 (F-8) is a mouse monoclonal antibody raised against amino acids 1-209 representing full length CSN8 of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CSN8 (F-8) is available conjugated to agarose (sc-393482 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393482 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393482 PE), fluorescein (sc-393482 FITC), Alexa Fluor[®] 488 (sc-393482 AF488), Alexa Fluor[®] 546 (sc-393482 AF546), Alexa Fluor[®] 594 (sc-393482 AF594) or Alexa Fluor[®] 647 (sc-393482 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393482 AF680) or Alexa Fluor[®] 790 (sc-393482 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

RESEARCH USE

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

APPLICATIONS

CSN8 (F-8) 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 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).

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.

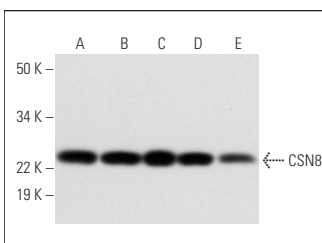
Molecular Weight of CSN8: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, T24 cell lysate: sc-2292 or SK-MEL-24 whole cell lysate: sc-364259.

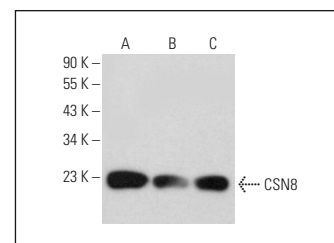
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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



CSN8 (F-8): sc-393482. Western blot analysis of CSN8 expression in HeLa (A), T24 (B), SK-MEL-24 (C) and MCF7 (D) whole cell lysates and human liver tissue extract (E).



CSN8 (F-8): sc-393482. Western blot analysis of CSN8 expression in HeLa (A), T-47D (B) and Hep G2 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Xu, M., et al. 2018. SHMT2 and the BRCC36/BRISC deubiquitinase regulate HIV-1 Tat K63-ubiquitylation and destruction by autophagy. *PLoS Pathog.* 14: e1007071.
- Mayor-Ruiz, C., et al. 2019. Plasticity of the cullin-RING ligase repertoire shapes sensitivity to ligand-induced protein degradation. *Mol. Cell* 75: 849-858.

STORAGE

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