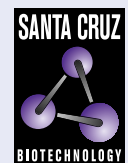


CSN1 (E-4): sc-514086



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 (COPS6), CSN7 α (COPS7, COPS7 α) or CSN7 β (COPS7 β) and CSN8 (COPS8). 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 the CSN-dependent phosphorylation of p53. c-Jun protects and promotes degradation by the Ubl system.

REFERENCES

1. Bech-Otschir, D., et al. 2001. COP9 signalosome-specific phosphorylation targets p53 to degradation by the ubiquitin system. *EMBO J.* 20: 1630-1639.
2. Lyapina, S., et al. 2001. Promotion of NEDD-CUL1 conjugate cleavage by COP9 signalosome. *Science* 292: 1382-1385.
3. Tsuge, T., et al. 2001. The subunit 1 of the COP9 signalosome suppresses gene expression through its N-terminal domain and incorporates into the complex through the PCI domain. *J. Mol. Biol.* 305: 1-9.
4. Mundt, K.E., et al. 2002. Deletion mutants in COP9/signalosome subunits in fission yeast *Schizosaccharomyces pombe* display distinct phenotypes. *Mol. Biol. Cell* 13: 493-502.

CHROMOSOMAL LOCATION

Genetic locus: GPS1 (human) mapping to 17q25.3; Gps1 (mouse) mapping to 11 E2.

SOURCE

CSN1 (E-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 391-413 near the C-terminus of CSN1 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.

CSN1 (E-4) is available conjugated to agarose (sc-514086 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514086 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514086 PE), fluorescein (sc-514086 FITC), Alexa Fluor[®] 488 (sc-514086 AF488), Alexa Fluor[®] 546 (sc-514086 AF546), Alexa Fluor[®] 594 (sc-514086 AF594) or Alexa Fluor[®] 647 (sc-514086 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514086 AF680) or Alexa Fluor[®] 790 (sc-514086 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514086 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

CSN1 (E-4) is recommended for detection of CSN1 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 CSN1 siRNA (h): sc-60455, CSN1 siRNA (m): sc-60456, CSN1 shRNA Plasmid (h): sc-60455-SH, CSN1 shRNA Plasmid (m): sc-60456-SH, CSN1 shRNA (h) Lentiviral Particles: sc-60455-V and CSN1 shRNA (m) Lentiviral Particles: sc-60456-V.

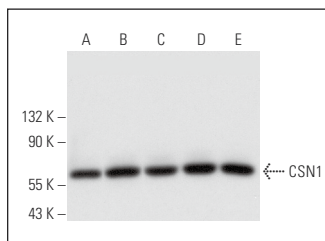
Molecular Weight of CSN1: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or HL-60 whole cell lysate: sc-2209.

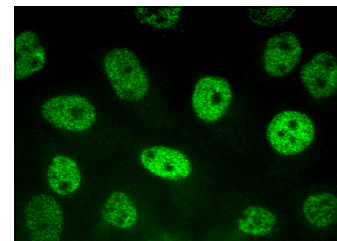
RECOMMENDED SUPPORT REAGENTS

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



CSN1 (E-4): sc-514086. Western blot analysis of CSN1 expression in HEL 92.1.7 (A), HeLa (B), HL-60 (C), MCF7 (D) and Raji (E) whole cell lysates.



CSN1 (E-4): sc-514086. Immunofluorescence staining of methanol-fixed HeLa 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.

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.