SANTA CRUZ BIOTECHNOLOGY, INC.

CSN6 (D-7): sc-137153

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

CHROMOSOMAL LOCATION

Genetic locus: COPS6 (human) mapping to 7q22.1; Cops6 (mouse) mapping to 5 G2.

SOURCE

CSN6 (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 231-268 near the C-terminus of CSN6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} 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-137153 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

CSN6 (D-7) is recommended for detection of CSN6 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).

CSN6 (D-7) is also recommended for detection of CSN6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CSN6 siRNA (h): sc-60461, CSN6 siRNA (m): sc-60462, CSN6 shRNA Plasmid (h): sc-60461-SH, CSN6 shRNA Plasmid (m): sc-60462-SH, CSN6 shRNA (h) Lentiviral Particles: sc-60461-V and CSN6 shRNA (m) Lentiviral Particles: sc-60462-V.

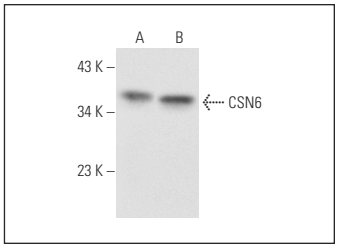
Molecular Weight of CSN6: 34 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, mouse brain extract: sc-2253 or 3T3-L1 cell lysate: sc-2243.

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



CSN6 (D-7): sc-137153. Western blot analysis of CSN6 expression in HeLa (**A**) and 3T3-L1 (**B**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. He, F., et al. 2013. X-linked intellectual disability gene CUL4B targets JAB1/CSN5 for degradation and regulates bone morphogenetic protein signaling. Biochim. Biophys. Acta 1832: 595-605.
2. Zhou, H., et al. 2021. Analysis of expression profiles and prognostic value of COP9 signalosome subunits for patients with head and neck squamous cell carcinoma. Oncol. Lett. 22: 803.
3. Jantaree, P., et al. 2022. USP48 and A20 synergistically promote cell survival in *Helicobacter pylori* infection. Cell. Mol. Life Sci. 79: 461.

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.