SANTA CRUZ BIOTECHNOLOGY, INC.

CSN6 (D-7): sc-137153



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, $l\kappa B\alpha$ 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 lgG_{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



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SELECT PRODUCT CITATIONS

- 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.
- 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.
- 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.