

COPS5 / JAB1 Antibody (clone 2A10.8) Mouse Monoclonal Antibody Catalog # ALS11854

Specification

COPS5 / JAB1 Antibody (clone 2A10.8) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>092905</u> Human, Mouse Mouse Monoclonal 38kDa KDa

COPS5 / JAB1 Antibody (clone 2A10.8) - Additional Information

Gene ID 10987

Other Names COP9 signalosome complex subunit 5, SGN5, Signalosome subunit 5, 3.4.-.-, Jun activation domain-binding protein 1, COPS5, CSN5, JAB1

Target/Specificity The full-length mouse JAB-1 gene expressed in E. coli.

Reconstitution & Storage Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions COPS5 / JAB1 Antibody (clone 2A10.8) is for research use only and not for use in diagnostic or therapeutic procedures.

COPS5 / JAB1 Antibody (clone 2A10.8) - Protein Information

Name COPS5

Synonyms CSN5, JAB1

Function

Probable protease subunit of the COP9 signalosome complex (CSN), a complex involved in various cellular and developmental processes. The CSN complex is an essential regulator of the ubiquitin (UbI) conjugation pathway by mediating the deneddylation of the cullin subunits of the SCF-type E3 ligase complexes, leading to decrease the Ubl ligase activity of SCF-type complexes such as SCF, CSA or DDB2. The complex is also involved in phosphorylation of p53/TP53, c-jun/JUN, IkappaBalpha/NFKBIA, ITPK1 and IRF8, possibly via its association with CK2 and PKD kinases. CSN-dependent phosphorylation of TP53 and JUN promotes and protects degradation by the Ubl system, respectively. In the complex, it probably acts as the catalytic center that mediates the cleavage of Nedd8 from cullins. It however has no metalloprotease activity by itself and requires the other subunits of the CSN complex. Interacts directly with a large number of proteins that are



regulated by the CSN complex, confirming a key role in the complex. Promotes the proteasomal degradation of BRSK2.

Cellular Location

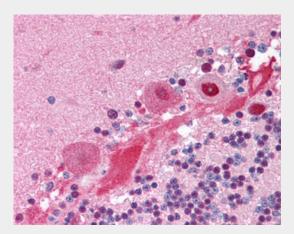
Cytoplasm, cytosol. Nucleus. Cytoplasm, perinuclear region. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle Note=Nuclear localization is diminished in the presence of IFIT3

COPS5 / JAB1 Antibody (clone 2A10.8) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

COPS5 / JAB1 Antibody (clone 2A10.8) - Images



Anti-COPS5 antibody IHC of human brain, cerebellum.

COPS5 / JAB1 Antibody (clone 2A10.8) - Background

Probable protease subunit of the COP9 signalosome complex (CSN), a complex involved in various cellular and developmental processes. The CSN complex is an essential regulator of the ubiquitin (UbI) conjugation pathway by mediating the deneddylation of the cullin subunits of the SCF-type E3 ligase complexes, leading to decrease the UbI ligase activity of SCF-type complexes such as SCF, CSA or DDB2. The complex is also involved in phosphorylation of p53/TP53, c-jun/JUN, IkappaBalpha/NFKBIA, ITPK1 and IRF8, possibly via its association with CK2 and PKD kinases. CSN-dependent phosphorylation of TP53 and JUN promotes and protects degradation by the UbI system, respectively. In the complex, it probably acts as the catalytic center that mediates the cleavage of Nedd8 from cullins. It however has no metalloprotease activity by itself and requires the other subunits of the CSN complex. Interacts directly with a large number of proteins that are regulated by the CSN complex, confirming a key role in the complex. Promotes the proteasomal degradation of BRSK2.

COPS5 / JAB1 Antibody (clone 2A10.8) - References



Claret F.-X.,et al.Nature 383:453-457(1996). Asano K.,et al.J. Biol. Chem. 272:27042-27052(1997). Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Bechtel S.,et al.BMC Genomics 8:399-399(2007). Bienvenut W.V.,et al.Submitted (OCT-2005) to UniProtKB.