

## COPS5 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP8867b

## **Specification**

## COPS5 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

**Q92905** 

# COPS5 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 10987** 

#### **Other Names**

COP9 signalosome complex subunit 5, SGN5, Signalosome subunit 5, 34--, Jun activation domain-binding protein 1, COPS5, CSN5, JAB1

# **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8867b>AP8867b</a> was selected from the C-term region of human COPS5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### COPS5 Antibody (C-term) Blocking Peptide - 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 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, lkappaBalpha/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.

### **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 Antibody (C-term) Blocking Peptide - Protocols

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

### Blocking Peptides

COPS5 Antibody (C-term) Blocking Peptide - Images

# COPS5 Antibody (C-term) Blocking Peptide - Background

The protein is one of the eight subunits of COP9 signalosome, a highly onserved protein complex that functions as an important regulator in multiple signaling pathways. The structure and function of COP9 signalosome is similar to that of the 19S regulatory particle of 26S proteasome. COP9 signalosome has been shown to interact with SCF-type E3 ubiquitin ligases and act as a positive regulator of E3 ubiquitin ligases. This protein is reported to be involved in the degradation of cyclin-dependent kinase inhibitor CDKN1B/p27Kip1. It is also known to be an coactivator that increases the specificity of JUN/AP1 transcription factors.

## COPS5 Antibody (C-term) Blocking Peptide - References

Nishimoto, A., et.al., Biochem. Biophys. Res. Commun. 391 (4), 1616-1622 (2010)