

COPS5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21563c

Product Information

Application WB, E Primary Accession Q92905

Reactivity Human, Rat, Mouse

HostRabbitClonalitypolyclonalIsotypeRabbit IgGClone NamesRB53049Calculated MW37579

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/SpecificityThis COPS5 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 187-222 amino acids from the Central

region of human COPS5.

Dilution WB~~1:500-1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions COPS5 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

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 (Ubl) 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

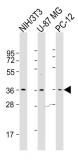
Background

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 (Ubl) 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.

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.

Images



All lanes: Anti-COPS5 Antibody (Center) at 1:500-1:1000 dilution Lane 1: NIH/3T3 whole cell lysates Lane 2: U-87 MG whole cell lysates Lane 3: PC-12 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.