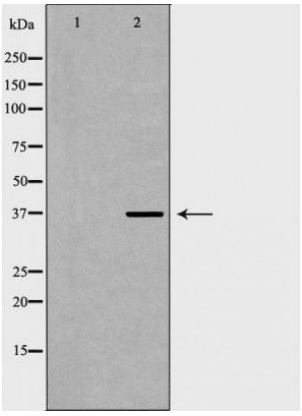
COPS5 Antibody

#24230

Catalog Number: 24230-1, 24230-2
Amount: 50μg/50μl, 100μg/100μl
Swiss-Prot No. :Q92905
Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.
Storage/Stability: Store at -20℃/1 year
Immunogen: The antiserum was produced against synthesized peptide derived from Human COPS5
Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Specificity/Sensitivity:COPS5 Antibody detects endogenous levels of total COPS5
Reactivity: Human,Mouse,Rat
Applications:
Predicted MW: 37kd WB:1:500-2000 IHC:1:50-200



Western blot analysis of extracts of variouscell lines, using COPS5 antibody.

Background :

The COP9 Signalosome (CSN) is a ubiquitously expressed multiprotein complex that is involved in a vast array of cellular and developmental processes, which is thought to be attributed to its control over the ubiquitin-proteasome pathway. Typically, the CSN is composed of eight highly conserved subunits (CSN1-CSN8), each of which is homologous to one of the eight subunits that form the lid of the 26S proteasome particle, suggesting that these complexes have a common evolutionary ancestor . CSN was first identified in Arabidopsis thaliana mutants with a light-grown seedling phenotype when grown in the dark . The

subsequent cloning of the constitutive morphogenesis 9 (cop9) mutant from Arabidopsis thaliana was soon followed by the biochemical purification of the COP9-containing multiprotein complex . It is now widely accepted that the CSN directly interacts with cullin-RING ligase (CRL) families of ubiquitin E3 complexes, and that CSN is required for their proper function . In addition, CSN may also regulate protein homeostasis through its association with protein kinases and deubiquitinating enzymes. Collectively, these activities position the CSN as a pivotal regulator of the DNA-damage response, cell-cycle control, and gene expression . COPS5/CSN5/Jab1 (c-Jun activation domain-binding protein-1) was originally identified as a transcriptional coactivator of c-Jun and subsequently discovered to be a fifth component and integral part of the CSN . As the catalytic center of the CSN, COPS5 is able to integrate multiple functions of the CSN complex such as cell-cycle control, transcription, and DNA-damage response by regulating the activity of CRLs through deneddylation of cullins .