

Anti-JAB1 Picoband Antibody

Catalog # ABO12178

Specification

Anti-JAB1 Picoband Antibody - Product Information

Application WB, IHC-P 092905 **Primary Accession** Rabbit Host Reactivity Clonality Polyclonal Format Lyophilized Description

Human, Mouse, Rat

Rabbit IgG polyclonal antibody for COP9 signalosome complex subunit 5 (COPS5) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-JAB1 Picoband Antibody - 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

Calculated MW 37579 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

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

Protein Name COP9 signalosome complex subunit 5

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human JAB1 recombinant protein (Position: M8-S334). Human JAB1 shares 99.4% amino acid (aa) sequence identity with mouse JAB1.

Purification Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the peptidase M67A family. CSN5 subfamily.

Anti-JAB1 Picoband Antibody - 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, 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.

Cellular Location

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

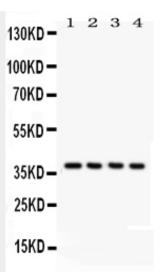
Anti-JAB1 Picoband Antibody - Protocols

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

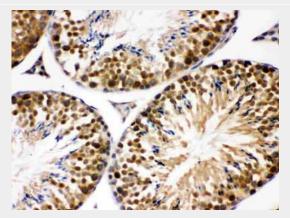
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-JAB1 Picoband Antibody - Images

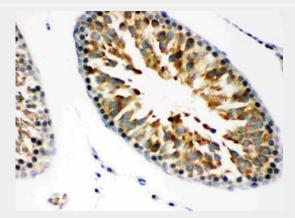




Anti- JAB1 Picoband antibody, ABO12178, Western blottingAll lanes: Anti JAB1 (ABO12178) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: 293T Whole Cell Lysate at 40ugPredicted bind size: 38KDObserved bind size: 38KD

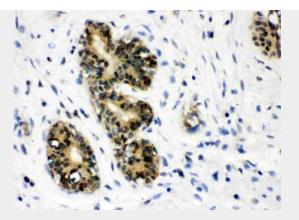


Anti- JAB1 Picoband antibody, ABO12178, IHC(P)IHC(P): Mouse Testis Tissue



Anti- JAB1 Picoband antibody, ABO12178, IHC(P)IHC(P): Rat Testis Tissue





Anti- JAB1 Picoband antibody, ABO12178, IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-JAB1 Picoband Antibody - Background

COP9 constitutive photomorphogenic homolog subunit 5 (Arabidopsis), also known as COP55 or JAB1, is a gene conserved from humans to Saccharomyces cerevisiae. It is a member of the MOV34 family. COP55 is mapped to 8q13.1. The protein encoded by this gene is one of the eight subunits of COP9 signalosome, a highly conserved protein complex that functions as an important regulator in multiple signaling pathways. COP55 can interact with the cytoplasmic domain of the beta-2 subunit of the alpha-L/beta-2 integrin LFA1, and it is the only protein demonstrated to interact with MIF. COP55, VHL, and TRC8 proteins appear to be linked both physically and functionally, and all 3 may participate in the development of kidney cancer. In addition to that, COP55 is an essential cofactor for the apoptotic function of E2F1.