

Anti-JAB1/COPS5 Antibody Picoband®

Catalog Number: PB9490

About COPS5

COP9 constitutive photomorphogenic homolog subunit 5 (Arabidopsis), also known as COPS5 or JAB1, is a gene conserved from humans to *Saccharomyces cerevisiae*. It is a member of the MOV34 family. COPS5 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. COPS5 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. COPS5, 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, COPS5 is an essential cofactor for the apoptotic function of E2F1.

Overview

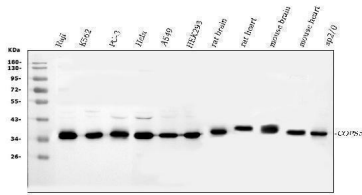
Product Name	Anti-JAB1/COPS5 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-JAB1/COPS5 Antibody Picoband® catalog # PB9490. Tested in Flow Cytometry, IP, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IP, IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q92905

Technical Details

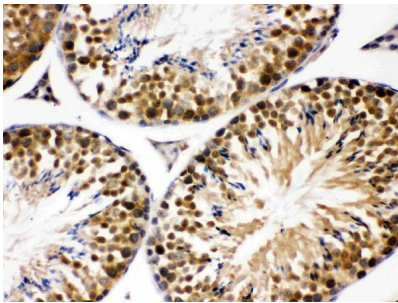
Immunogen	E.coli-derived human JAB1 recombinant protein (Position: M8-S334). Human JAB1 shares 99.4% amino acid (aa) sequence identity with mouse JAB1.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Immunoprecipitation, 0.5-2 ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells, Human

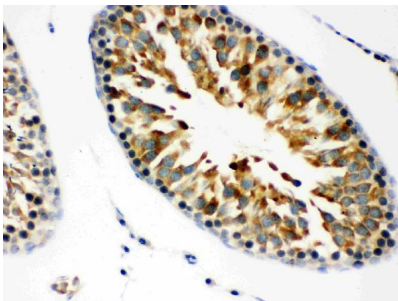
Anti-JAB1/COPS5 Antibody Picoband® (PB9490) Images



Western blot analysis of JAB1 using anti-JAB1 antibody (PB9490). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Raji whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human PC-3 whole cell lysates, Lane 4: human Hela whole cell lysates, Lane 5: human A549 whole cell lysates, Lane 6: human HEK293 whole cell lysates, Lane 7: rat brain tissue lysates, Lane 8: rat heart tissue lysates, Lane 9: mouse brain tissue lysates, Lane 10: mouse heart tissue lysates, Lane 11: mouse SP2/0 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-JAB1 antigen affinity purified polyclonal antibody (Catalog # PB9490) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for JAB1 at approximately 38 kDa. The expected band size for JAB1 is at 38 kDa.

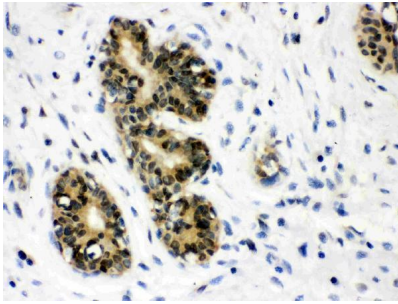


IHC analysis of JAB1 using anti-JAB1 antibody (PB9490). JAB1 was detected in a paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-JAB1 Antibody (PB9490) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

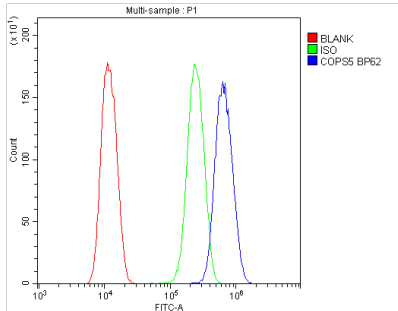


IHC analysis of JAB1 using anti-JAB1 antibody (PB9490). JAB1 was detected in a paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-JAB1 Antibody (PB9490) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

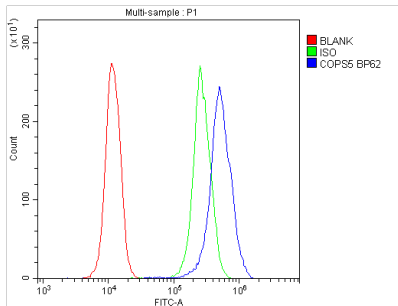
IHC analysis of JAB1 using anti-JAB1 antibody (PB9490). JAB1 was detected in a paraffin-embedded section of human



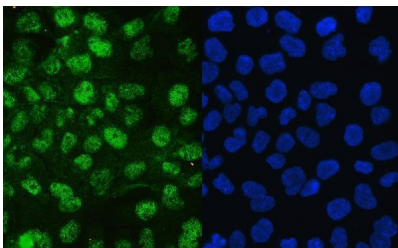
mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-JAB1 Antibody (PB9490) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



Flow Cytometry analysis of U20S cells using anti-JAB1 antibody (PB9490). Overlay histogram showing U20S cells stained with PB9490 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-JAB1 Antibody (PB9490, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

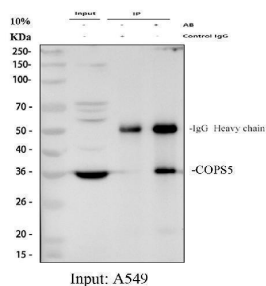


Flow Cytometry analysis of U937 cells using anti-JAB1 antibody (PB9490). Overlay histogram showing U937 cells stained with PB9490 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-JAB1 Antibody (PB9490, 1ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



ICC analysis of JAB1 using anti-JAB1 antibody (PB9490). JAB1 was detected in immunocytochemical section of A431 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 1ug/ml rabbit anti-JAB1 Antibody (PB9490) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Immunoprecipitating (IP) JAB1 in A549 whole cell lysate. Western blot analysis of JAB1 using anti-JAB1 antibody (PB9490); Lane 1: A549 whole cell lysates (30ug); Lane 2:



Rabbit control IgG instead of anti-JAB1 antibody in A549 whole cell lysate; Lane 3: anti-JAB1 antibody (2ug) + A549 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-JAB1 antigen affinity purified polyclonal antibody (PB9490) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for JAB1 at approximately 38 kDa. The expected band size for JAB1 is at 38 kDa.

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Anti-JAB1/COPS5 Antibody

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