BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-KAP1/TRIM28 Antibody Picoband® (monoclonal, 9E3)

Catalog Number: M00409-2

About TRIM28

Tripartite motif-containing 28 (TRIM28), also known as transcriptional intermediary factor 1beta (TIF1beta) and KAP1 (KRAB-associated protein-1), is a protein that in humans is encoded by the TRIM28 gene. The protein encoded by this gene mediates transcriptional control by interaction with the Kruppel-associated box repression domain found in many transcription factors. The protein localizes to the nucleus and is thought to associate with specific chromatin regions. KAP1 is a ubiquitously expressed protein involved in many critical functions including: transcriptional regulation, cellular differentiation and proliferation, DNA damage repair, viral suppression, and apoptosis. Its functionality is dependent upon post-translational modifications. Phosphorylation of KAP1 acts as a deactivator of the protein in many of its mechanisms while sumoylation acts as an activator.

Overview

Product Name	Anti-KAP1/TRIM28 Antibody Picoband® (monoclonal, 9E3)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-KAP1/TRIM28 Antibody Picoband® (monoclonal, 9E3) catalog # M00409-2. Tested in Flow Cytometry, 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, IF, IHC, IHC-F, ICC, WB
Clonality	Monoclonal 9E3
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
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	Mouse
Uniprot ID	Q13263

Technical Details

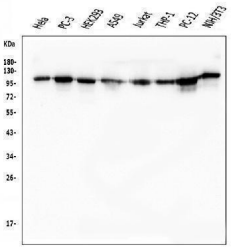
Immunogen	E.coli-derived human KAP1 recombinant protein (Position: A699-P835). Human KAP1 shares 94.9% amino acid (aa) sequence identity with both mouse and rat KAP1.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti- Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins.

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

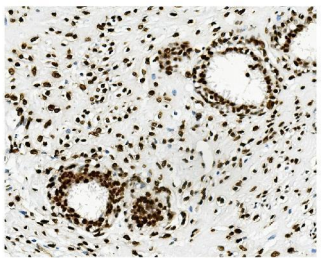
Isotype	Mouse IgG2a
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human, Rat Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Immunofluorescence, 2ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10^6 cells, Human

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

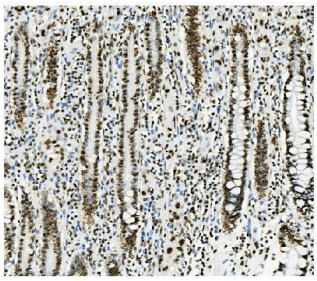
Anti-KAP1/TRIM28 Antibody Picoband® (monoclonal, 9E3) (M00409-2) Images



Western blot analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). 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 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates; Lane 2: human PC-3 whole cell lysates; Lane 3: human HEK293 whole cell lysates; Lane 4: human A549 whole cell lysates; Lane 5: human Jurkat whole cell lysates; Lane 6: human THP-1 whole cell lysates; Lane 7: rat PC-12 whole cell lysates; Lane 8: mouse NIH/3T3 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-KAP1/TRIM28 antigen affinity purified monoclonal antibody (Catalog # M00409-2) 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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for KAP1/TRIM28 at approximately 100KD. The expected band size for KAP1/TRIM28 is at 100KD.

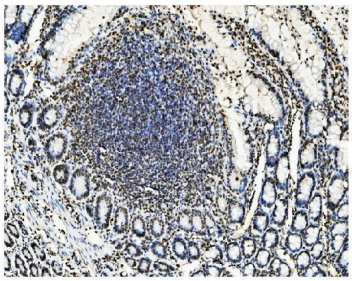


IHC analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). KAP1/TRIM28 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

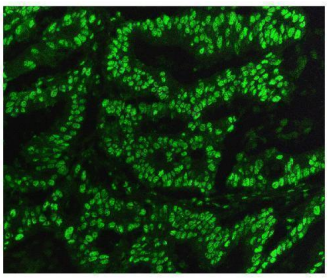


IHC analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). KAP1/TRIM28 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.

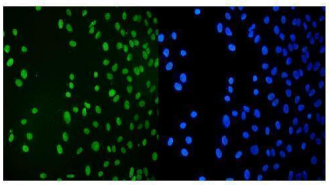
BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



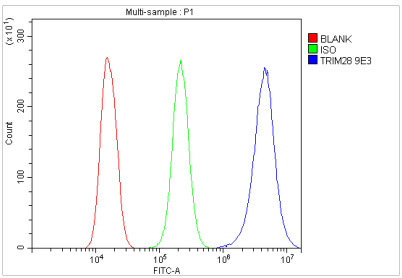
IHC analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). KAP1/TRIM28 was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB as the chromogen.



IF analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). KAP1/TRIM28 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/mL mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



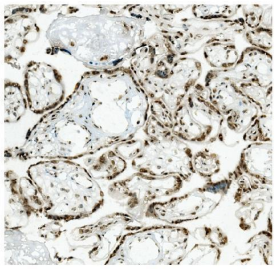
IF analysis of KAP1/TRIM28 using anti-KAP1/TRIM28 antibody (M00409-2). KAP1/TRIM28 was detected in immunocytochemical section of U20S cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of A549 cells using anti-KAP1/TRIM28 antibody (M00409-2). Overlay histogram showing A549 cells stained with M00409-2 (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 mouse anti- KAP1/TRIM28 Antibody (M00409-2, 1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse 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.

IHC analysis of KAP1/TRIM28 using anti-KAP1/TRIM28

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com



antibody (M00409-2). KAP1/TRIM28 was detected in frozen section of human placenta tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml mouse anti-KAP1/TRIM28 Antibody (M00409-2) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

1 Publications Citing This Product

1. PubMed ID: 33385414, Hao Y,Bai S,Peng J,Hong R,Ding J,Li Z,Guan Y.TRIM27-mediated ubiquitination of PPARgamma promotes glutamate-induced cell apoptosis and inflammation.Exp Cell Res.2020 Dec 29:112437.doi:10.1016/j.yexcr.2020. 112437.Epub ahead of print.PMID:33385414.

Visit bosterbio.com/anti-kap1-trim28-picoband-trade-antibody-m00409-2-boster.html to see all 1 publications.

Anti-KAP1/TRIM28 Antibody (monoclonal, 9E3)

For Research Use Only. Not for use in diagnostic procedures.