

Anti-MEKK2/MAP3K2 Antibody Picoband®

Catalog Number: A02354-1

About MAP3K2

MAP3K2, mitogen-activated protein kinase kinase kinase 2, also known as MEKK2, belongs to the mitogen-activated protein kinase (MAPK) kinase gene family, which is involved in regulating multiple MAPK signaling pathways. Endogenous MAP3K2 localized mainly to the cytosol of unstimulated HeLa cells and rat fibroblasts. The MAP3K2 gene is mapped to chromosome 2 by the International Radiation Hybrid Mapping Consortium. MAP3K2 is a major upstream activator of the JNK, MAPK cascade. MAP3K2 was identified as 1 of 6 kinases that regulate different steps of the caveolar cycle. Silencing of MAP3K2 strongly reduced kiss-and-run dynamics, leading to an accumulation of caveolar structures at the cell surface without affecting caveolae coat assembly or clustering.

Overview

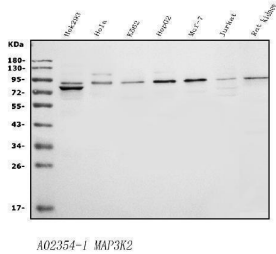
Product Name	Anti-MEKK2/MAP3K2 Antibody Picoband®
Reactive Species	Human, Rat
Description	Boster Bio Anti-MEKK2/MAP3K2 Antibody Picoband® catalog # A02354-1. Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody 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, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
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	Q9Y2U5

Technical Details

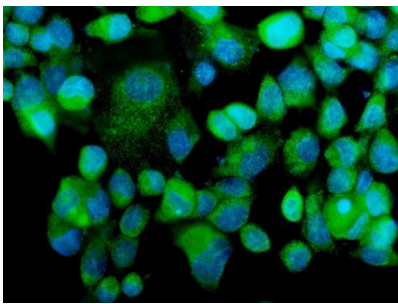
Immunogen	E.coli-derived human MEKK2/MAP3K2 recombinant protein (Position: M1-Q364).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	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, 0.25-0.5ug/ml, Human, Rat Immunocytochemistry/Immunofluorescence, 5ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5ug/ml, Human

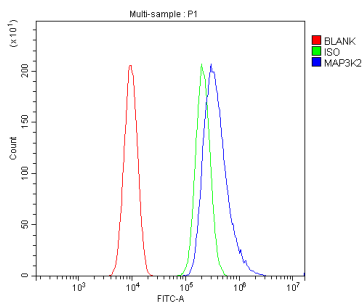
Anti-MEKK2/MAP3K2 Antibody Picoband® (A02354-1) Images



Western blot analysis of MEKK2/MAP3K2 using anti-MEKK2/MAP3K2 antibody (A02354-1). 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 HEK293 whole cell lysates, Lane 2: human HeLa whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: human MCF-7 whole cell lysates, Lane 6: human Jurkat whole cell lysates, Lane 7: rat kidney tissue 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 rabbit anti-MEKK2/MAP3K2 antigen affinity purified polyclonal antibody (Catalog # A02354-1) 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 MEKK2/MAP3K2 at approximately 78KD. The expected band size for MEKK2/MAP3K2 is at 78KD.



IF analysis of MEKK2/MAP3K2 using anti-MEKK2/MAP3K2 antibody (A02354-1). MEKK2/MAP3K2 was detected in immunocytochemical section of A431 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 5ug/mL rabbit anti-MEKK2/MAP3K2 Antibody (A02354-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) 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 SiHa cells using anti-MEKK2/MAP3K2 antibody (A02354-1). Overlay histogram showing SiHa cells stained with A02354-1 (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-MEKK2/MAP3K2 Antibody (A02354-1, 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.

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Anti-MEKK2/MAP3K2 Antibody

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