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Anti-MEKK3/MAP3K3 Antibody

Catalog Number: PA1924

About MAP3K3

MAP3K3 (Mitogen-activated protein kinase kinase kinase 3), also known as MAP/ERK KINASE KINASE 3, MEKK3 or MAPKKK3, is an enzyme that in humans is encoded by the MAP3K3 gene. MAP3K3 is contiguously distal to LYK5 on chromosome 17 (Puffenberger et al., 2007). By yeast 2-hybrid analysis of a mouse T-cell cDNA library, Uhlik et al. (2003) showed that a C-terminal fragment of mouse Osm (CCM2) interacted with Mekk3, which activates p38 in response to sorbitol-induced hyperosmotic conditions. Mekk3 and Osm colocalized in the cytoplasmic compartment of cotransfected cells, and the Mekk3-Osm complex was recruited to Rac1 and cytoskeletal actin-containing membrane ruffles in response to sorbitol treatment. Protein interaction assays showed that Osm interacted directly with the Mekk3 substrate Mkk3 (MAP2K3), with actin, and with both GDP- and GTP-loaded Rac1. Uhlik et al. (2003) concluded that the RAC1-OSM-MEKK3-MKK3 complex is required for regulation of p38 activity in response to osmotic shock.

Overview

Product Name	Anti-MEKK3/MAP3K3 Antibody
Reactive Species	Human
Description	Boster Bio Anti-MEKK3/MAP3K3 Antibody catalog # PA1924. Tested in WB applications. This antibody reacts with Human.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
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	Q99759

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MEKK3.
Predicted Reactive Species	Hamster
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG

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Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml, Human

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Anti-MEKK3/MAP3K3 Antibody (PA1924) Images

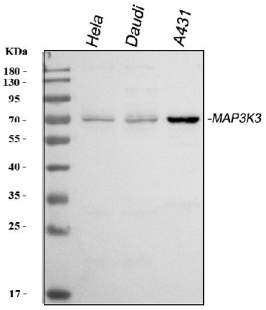

Figure 1. Western blot analysis of MEKK3/MAP3K3 using anti-MEKK3/MAP3K3 antibody (PA1924).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human Daudi whole cell lysates,
Lane 3: human A431 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-MEKK3/MAP3K3 antigen affinity purified polyclonal antibody (Catalog # PA1924) 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 MEKK3/MAP3K3 at approximately 71 kDa. The expected band size for MEKK3/MAP3K3 is at 71 kDa.