

# Anti-MEK4/MAP2K4 Antibody Picoband™

Catalog Number: A01725-1

#### **About MAP2K4**

Dual specificity mitogen-activated protein kinase 4 is an enzyme that in humans is encoded by the MAP2K4 gene. It is mapped to 10q23.31. This gene encodes a member of the mitogen-activated protein kinase (MAPK) family. Members of this family act as an integration point for multiple biochemical signals and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation, and development. They form a three-tiered signaling module composed of MAPKKKs, MAPKKs, and MAPKs. This protein is phosphorylated at serine and threonine residues by MAPKKKs and subsequently phosphorylates downstream MAPK targets at threonine and tyrosine residues. A similar protein in mouse has been reported to play a role in liver organogenesis. A pseudogene of this gene is located on the long arm of chromosome X. Alternative splicing results in multiple transcript variants.

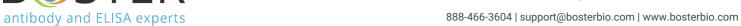
#### Overview

Product Name	Anti-MEK4/MAP2K4 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MEK4/MAP2K4 Antibody Picoband™ catalog # A01725-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 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	P45985

## **Technical Details**

Immunogen	E.coli-derived human MEK4/MAP2K4 recombinant protein (Position: E92-A378).
Predicted Reactive Species	Human
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
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  Direct ELISA, 0.1-0.5ug/ml



### Anti-MEK4/MAP2K4 Antibody Picoband™ (A01725-1) Images

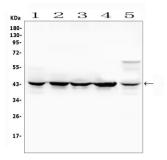


Figure 1. Western blot analysis of MAP2K4 using anti-MAP2K4 antibody (A01725-1).

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 Hela whole cell lysates,

Lane 2: human placenta tissue lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human A549 whole cell lysates,

Lane 5: human 22RV1 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 rabbit anti-MAP2K4 antigen affinity purified polyclonal antibody (Catalog # A01725-1) 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 1:10000 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 MAP2K4 at approximately 44KD. The expected band size for MAP2K4 is at 44KD.

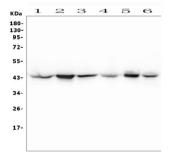


Figure 2. Western blot analysis of MAP2K4 using anti-MAP2K4 antibody (A01725-1).

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: rat brain tissue lysates,

Lane 2: rat kidney tissue lysates,

Lane 3: rat skeletal muscle tissue lysates,

Lane 4: mouse brain tissue lysates,

Lane 5: mouse kidney tissue lysates,

Lane 6: mouse lung 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-MAP2K4 antigen affinity purified polyclonal antibody (Catalog # A01725-1) 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 1:10000 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 MAP2K4 at approximately 44KD. The expected band size for MAP2K4 is at 44KD.







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