

Anti-ERK2/MAPK1 Antibody Picoband®

Catalog Number: PA1310

About MAPK1

Mitogen-activated protein kinase 1, also known as MAPK1, p42MAPK, and ERK2, is an enzyme which in humans is encoded by the MAPK1 gene. The gene is mapped to 22q11.2. And The protein encoded by this gene is a member of the MAP kinase family. The deduced 360-amino acid human ERK2 protein shares 98% identity with rat Erk2. The MAP kinase ERK2 is widely involved in eukaryotic signal transduction. Upon activation, it translocates to the nucleus of the stimulated cell, where it phosphorylates nuclear targets. Furthermore, the ERK pathway is necessary for experience-dependent plasticity and for long-term potentiation of synaptic transmission in the developing visual cortex. And the MAPK pathway is also involved in responses to NTN1.

Overview

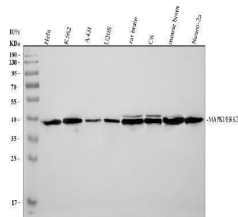
Product Name	Anti-ERK2/MAPK1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ERK2/MAPK1 Antibody catalog # PA1310. Tested in WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior 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	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg 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	P28482

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ERK2, identical to the related rat and mouse sequences.
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	Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

Anti-ERK2/MAPK1 Antibody Picoband® (PA1310) Images



Western blot analysis of ERK2/MAPK1 using anti-ERK2/MAPK1 antibody (PA1310). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 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 K562 whole cell lysates, Lane 3: human A431 whole cell lysates, Lane 4: human U2OS whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse Neuro-2a 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-ERK2/MAPK1 antigen affinity purified polyclonal antibody (PA1310) 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 ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for ERK2/MAPK1 at approximately 41 kDa. The expected band size for ERK2/MAPK1 is at 41 kDa.

5 Publications Citing This Product

1. PubMed ID: 21769431, Sang J, Chen Y, Tao Y. Mol Med Rep. 2011 Nov-Dec;4(6):1163-7. Doi: 10.3892/Mmr.2011.535. Epub 2011 Jul 15. Nitric Oxide Inhibits Gastric Cancer Cell Growth Through The Modulation Of The Akt Pathway.
2. PubMed ID: 28193911, eIF3i activity is critical for endothelial cells in tumor induced angiogenesis through regulating VEGFR and ERK translation
3. PubMed ID: 24718680, Ma Hr, Wang J, Chen Yf, Chen H, Wang Ws, Aisa Ha. Int J Mol Med. 2014 Jun;33(6):1627-34. Doi: 10.3892/Ijmm.2014.1722. Epub 2014 Apr 3. Icaritin And Icaritin Stimulate The Proliferation Of Skbr3 Cells Through The Gper1-Mediated Modulation Of The Egf...

Visit bosterbio.com/anti-erk2-antibody-pa1310-boster.html to see all 5 publications.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-ERK2/MAPK1 Antibody

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