

Anti-ERK1/MAPK3 Antibody Picoband®

Catalog Number: PA1343

About MAPK3

Mitogen-activated protein kinase 3 is an enzyme that in humans is encoded by the MAPK3 gene. The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. MAPK3 gene is mapped to human chromosome 16 by hybrid cell panel analysis.

Overview

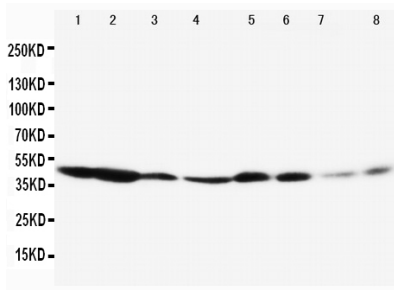
Product Name	Anti-ERK1/MAPK3 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ERK1/MAPK3 Antibody catalog # PA1343. Tested in IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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	IHC, ICC, 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	P27361

Technical Details

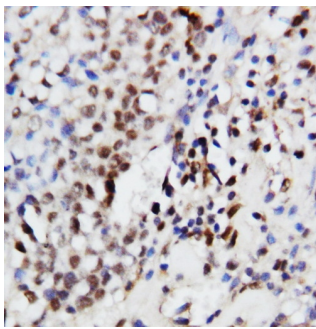
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ERK1, identical to the related mouse and rat sequences.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and 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	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Rat, Mouse Immunocytochemistry , 0.5-1ug/ml, Human, Mouse, Rat Western blot, 0.1-0.5ug/ml, Human, Rat, Mouse

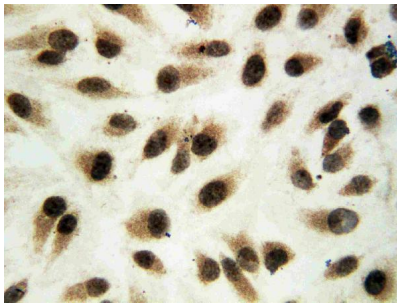
Anti-ERK1/MAPK3 Antibody Picoband® (PA1343) Images



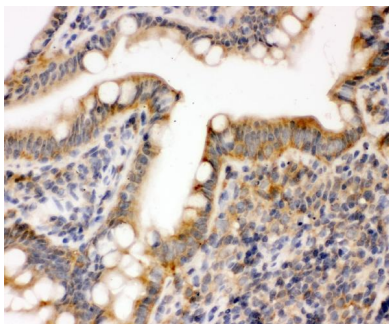
Anti-ERK1 antibody, PA1343, Western blotting
Lane 1: Rat Spleen Tissue Lysate
Lane 2: Rat Thymus Tissue Lysate
Lane 3: Rat Skeletal Muscle Tissue Lysate
Lane 4: Rat Kidney Tissue Lysate
Lane 5: HELA Cell Lysate
Lane 6: JURKAT Cell Lysate
Lane 7: RAJI Cell Lysate
Lane 8: COLO320 Cell Lysate



Anti-ERK1 antibody, PA1343, IHC(P)
IHC(P): Human Mammary Cancer Tissue



Anti-ERK1 antibody, PA1343, IHC(P)
ICC: HELA Cell



IHC analysis of ERK1 using anti-ERK1 antibody (PA1343). ERK1 was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-ERK1 Antibody (PA1343) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

10 Publications Citing This Product

1. PubMed ID: 17392578, Hu Cp, Feng Jt, Tang Yl, Zhu Jq, Lin Mj, Yu Me. Mediators Inflamm. 2006;2006(5):84829. Lif Upregulates Expression Of Nk-1R In Nhbe Cells.
2. PubMed ID: 24809625, Yang Sl, Han R, Liu Y, Hu Ly, Li Xi, Zhu Ly. Wound Repair Regen. 2014 Jul-Aug;22(4):548-54. Doi: 10.1111/Wrr.12195. Negative Pressure Wound Therapy Is Associated With Up-Regulation Of Bfgf And Erk1/2 In Human Diabetic Foot Wounds.

3. PubMed ID: 25337216, Liu Y, Zhu Z, Xiong Z, Zheng J, Hu Z, Qiu J. Int J Clin Exp Pathol. 2014 Aug 15;7(9):5750-61. Ecollection 2014. Knockdown Of Protein Tyrosine Phosphatase Receptor U Inhibits Growth And Motility Of Gastric Cancer Cells.

Visit bosterbio.com/anti-erk1-antibody-pa1343-boster.html to see all 10 publications.

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