

Anti-CaMKK/CAMKK1 Antibody Picoband®

Catalog Number: PA1520

About Camkk1

CAMKK1, Calcium/calmodulin-dependent protein kinase kinase 1 is an enzyme that in humans is encoded by the CAMKK1 gene. The CAMKK1 gene is mapped to chromosome 17. The product of this gene belongs to the Serine/Threonine protein kinase family, and to the Ca (2+)/calmodulin-dependent protein kinase subfamily. This protein plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade. Three transcript variants encoding two distinct isoforms have been identified for this gene. Camkk1 binds calmodulin and activated Camk4 with a 6-fold increase in total activity and a 100-fold increase in Camk4 Ca (2+)-independent activity. Camkk1 catalyzed a 10-fold increase in the total activity of Camk1 and had no effect on Camk2. Cotransfection of COS-7 cells with Camk1 and Camk4 resulted in a 14-fold increase in CRE-binding protein-dependent transcription compared with Camk4 alone, suggesting that Camkk1 enhances Camk4-mediated transcriptional regulation.

Overview

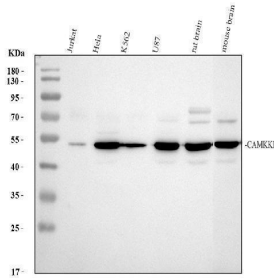
Product Name	Anti-CaMKK/CAMKK1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CaMKK/CAMKK1 Antibody catalog # PA1520. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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, 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	Q8VBY2

Technical Details

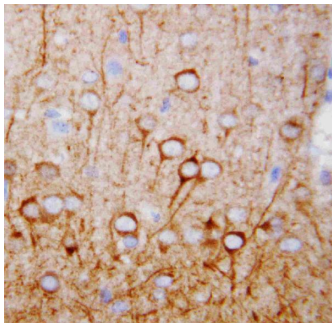
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of mouse CaMKK, different from the related human sequence by three amino acids, and from the related rat sequence by two amino acids.
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Recommended Detection Systems	Boster recommends 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).
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, Rat, Mouse Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

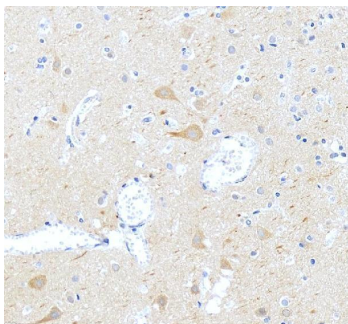
Anti-CaMKK/CAMKK1 Antibody Picoband® (PA1520) Images



Western blot analysis of CAMKK1 using anti-CAMKK1 antibody (PA1520). Electrophoresis was performed on a 8% 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 Jurkat whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human U87 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: mouse brain tissue 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-CAMKK1 antigen affinity purified polyclonal antibody (PA1520) 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 CAMKK1 at approximately 56 kDa. The expected band size for CAMKK1 is at 56 kDa.



Anti-CaMKK antibody, PA1520, IHC(P)IHC(P): Rat Brain Tissue



IHC analysis of CAMKK1 using anti-CAMKK1 antibody (PA1520). CAMKK1 was detected in a paraffin-embedded section of human brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CAMKK1 Antibody (PA1520) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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Anti-CaMKK/CAMKK1 Antibody

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