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Anti-CaMKK Antibody
Catalog # ABO10839

Specification

Anti-CaMKK Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q8VBY2
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Calcium/calmodulin-dependent protein kinase kinase 1(CAMKK1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CaMKK Antibody - Additional Information

Gene ID 55984

Other Names
Calcium/calmodulin-dependent protein kinase kinase 1, CaM-KK 1, CaM-kinase kinase 1, CaMKK 1, 2.7.11.17, CaM-kinase IV kinase, Calcium/calmodulin-dependent protein kinase kinase alpha, CaM-KK alpha, CaM-kinase kinase alpha, CaMKK alpha, Camkk1, Camkk

Calculated MW
55838 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
Cytoplasm . Nucleus .

Tissue Specificity
Widely expressed. Differentially expressed in various brain regions. .

Protein Name
Calcium/calmodulin-dependent protein kinase kinase 1(CaM-KK 1/CaM-kinase kinase 1/CaMKK 1)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of mouse CaMKK(10-31aa QDPRAELVDRVAAINVAHLEEA), different from the related human sequence by three amino acids,

and from the related rat sequence by two amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.

Anti-CaMKK Antibody - Protein Information

Name Camkk1

Synonyms Camkk

Function
Calcium/calmodulin-dependent protein kinase that belongs to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Phosphorylates CAMK1, CAMK1D, CAMK1G and CAMK4. Involved in regulating cell apoptosis. Promotes cell survival by phosphorylating AKT1/PKB that inhibits pro-apoptotic BAD/Bcl2- antagonist of cell death.

Cellular Location
Cytoplasm. Nucleus.

Tissue Location
Widely expressed. Differentially expressed in various brain regions.

Anti-CaMKK Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CaMKK Antibody - Images

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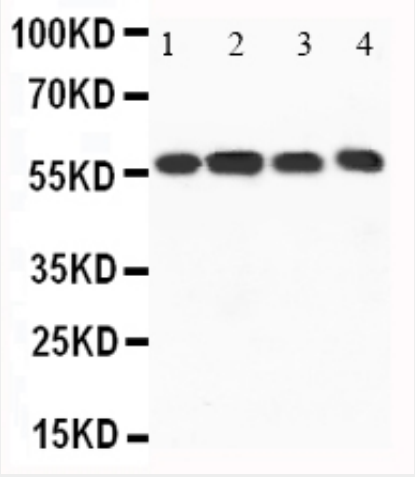
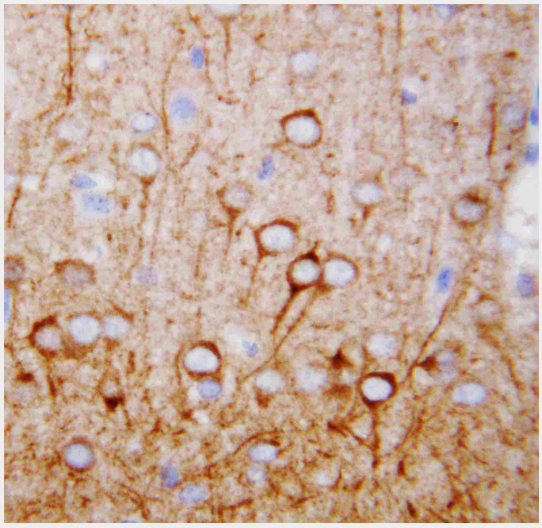


Anti-CaMKK antibody, ABO10839, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: Mouse Brain Tissue LysateLane 4: Mouse Brain Tissue Lysate



Anti-CaMKK antibody, ABO10839, IHC(P)IHC(P): Rat Brain Tissue

Anti-CaMKK Antibody - Background

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.Camkk1binds 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 Camkk1 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.