

CaMKK Antibody (R30595)

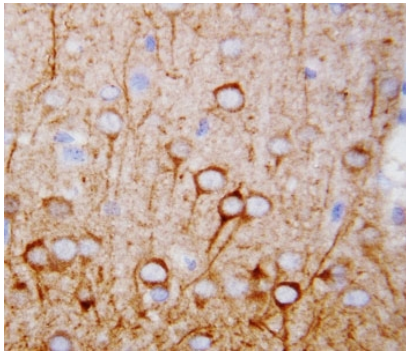
Catalog No.	Formulation	Size
R30595	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q8VBY2
Applications	Western blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This CaMKK antibody is available for research use only.



Western blot testing of CaMKK antibody and Lane 1: rat brain; 2: mouse brain



IHC-P: CaMKK antibody testing of rat brain tissue

Description

Calcium/calmodulin-dependent protein kinase kinase 1 is an enzyme that in humans is encoded by the CAMKK1 gene. 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. CaMKK binds calmodulin and activated Camk4 with a 6-fold increase in total activity and a 100-fold increase in Camk4 Ca(2+)-independent activity. It catalyzed a 10-fold increase in the total activity of CaMK1 and had no effect on CaMK2. Cotransfection of COS-7 cells with CaMKK and Camk4 resulted in a 14-fold increase in CRE-binding protein-dependent transcription compared with Camk4 alone, suggesting that CaMKK enhances Camk4-mediated transcriptional regulation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the CaMKK antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 10-31 (QDPRAELVDRVAAINVAHLEEA-mouse) were used as the immunogen for this CaMKK antibody.

Storage

After reconstitution, the CaMKK antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.