



Rabbit Anti-CaMKII monoclonal antibody, clone TV14-68 (CABT-L650)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	CaMKII
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	TV14-68
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, ICC/IF, IHC
Molecular Weight	54 kDa
Cellular Localization	Cytoplasm, Sarcoplasmic reticulum membrane, Cell membrane, Cell junction.
Positive Control	PC-12, SHG-44, Hela, SH-SY-5Y, mouse brain tissue, rat brain tissue, mouse cerebellum tissue, rat cerebellum tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction	<p>The Ca²⁺/calmodulin-dependent protein kinases (CaM kinases) comprise a structurally related subfamily of serine/threonine kinases which include CaMKI, CaMKII and CaMKIV. CaMKII is a ubiquitously expressed serine/threonine protein kinase that is activated by Ca²⁺ and calmodulin (CaM) and has been implicated in regulation of the cell cycle and transcription. There are four CaMKII isozymes designated α, β, γ and δ, which may or may not be co-expressed in the same tissue type. CaMKIV is stimulated by Ca²⁺ and CaM but also requires phosphorylation by a CaMK for full activation. Stimulation of the T cell receptor CD3 signaling complex with an anti-CD3 monoclonal antibody leads to a 10-40 fold increase in CaMKIV activity. An additional kinase, CaMKK, functions to activate CaMKI through the specific phosphorylation of the regulatory Threonine residue at position 177.</p>
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Keywords	<p>Calcium/calmodulin dependent protein kinase II alpha; Calcium/calmodulin dependent protein kinase II beta; Calcium/calmodulin dependent protein kinase II delta; Calcium/calmodulin dependent protein kinase II gamma; Calcium/calmodulin-dependent protein kinase type II subunit alpha; CaM kinase II alpha; CaM kinase II; CaM kinase II beta; CaM kinase II delta; CaM kinase II gamma; CaM kinase II subunit alpha; CaMK-II subunit alpha; CAMK2; Camk2a; CAMK2B; CAMK2D; CAMK2G; CAMKA; KCC2A_HUMAN antibody</p>
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GENE INFORMATION

Entrez Gene ID	56158
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