

## CaMKII alpha Rabbit mAb

Catalog No: #49467



Package Size: #49467-1 50ul #49467-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

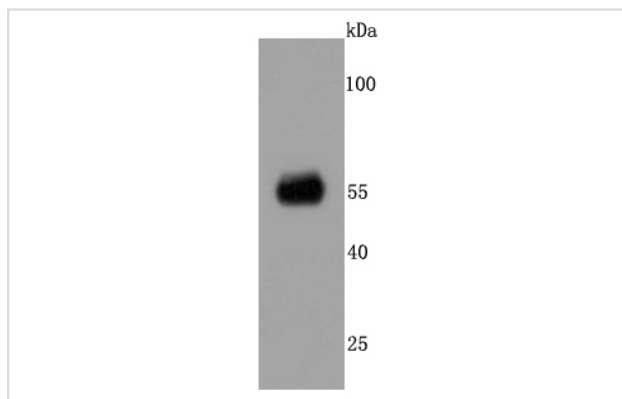
## Description

Product Name	CaMKII alpha Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JM11-07
Purification	ProA affinity purified
Applications	WB, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	Alpha CaMKII antibody Calcium calmodulin dependent protein kinase II antibody Calcium/calmodulin dependent protein kinase II alpha B subunit antibody Calcium/calmodulin dependent protein kinase type II alpha chain antibody Calcium/calmodulin-dependent protein kinase (CaM kinase) II alpha antibody Calcium/calmodulin-dependent protein kinase II alpha antibody Calcium/calmodulin-dependent protein kinase II-alpha antibody Calcium/calmodulin-dependent protein kinase type II subunit alpha antibody Calcium/calmodulin-dependent protein kinase type IIA antibody CaM kinase II alpha chain antibody CaM kinase II alpha subunit antibody CaM kinase II subunit alpha antibody CaMK II alpha subunit antibody CaMK-II subunit alpha antibody Camk2a antibody CAMKA antibody CaMKII antibody CaMKIINalpha antibody EC 2.7.11.17 antibody KCC2A_HUMAN antibody KIAA0968 antibody MGC123320 antibody MGC139375 antibody MGC155201 antibody mKIAA0968 antibody PK2CDD antibody PKCCD antibody R74975 antibody zgc:112538 antibody zgc:123320 antibody
Accession No.	Swiss-Prot#:Q9UQM7
Uniprot	Q9UQM7
GeneID	815;
Calculated MW	54 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

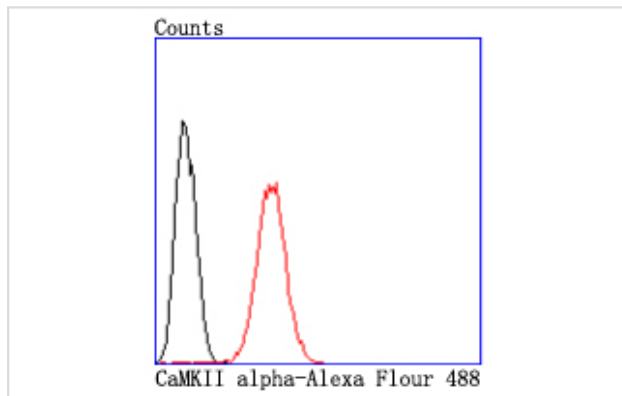
## Application Details

WB: 1:1,000-1:2,000 IP: 1:10-1:50FC: 1:50-1:100

## Images



Western blot analysis of CaMKII alpha on rat brain cells lysates using anti-CaMKII alpha antibody at 1/500 dilution.



Flow cytometric analysis of SH-SY5Y cells with CaMKII alpha antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

## Background

The Ca<sup>2+</sup>/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 Ca<sup>2+</sup> and calmodulin (CaM) and has been implicated in regulation of the cell cycle and transcription. There are four CaMKII isozymes designated  $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ , which may or may not be co-expressed in the same tissue type. CaMKIV is stimulated by Ca<sup>2+</sup> 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.

## References

Note: This product is for in vitro research use only