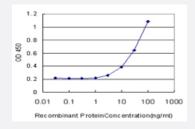


CAMK2A monoclonal antibody (M04), clone 2C11

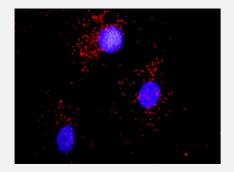
Catalog # H00000815-M04 Size 100 ug

Applications



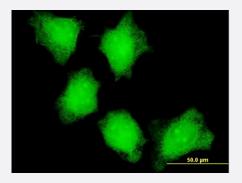
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CAMK2A is approximately 1ng/ml as a capture antibody.



In situ Proximity Ligation Assay (Cell)

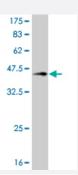
Proximity Ligation Analysis of protein-protein interactions between ACTN1 and CAMK2A. HeLa cells were stained with anti-ACTN1 rabbit purified polyclonal 1:1200 and anti-CAMK2A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Immunofluorescence

Immunofluorescence of monoclonal antibody to CAMK2A on HeLa cell . [antibody concentration 10 ug/ml]





Western Blot detection against Immunogen (37.29 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a partial recombinant CAMK2A.
Immunogen	CAMK2A (AAH40457, 305 a.a. ~ 410 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	TTMLATRNFSGGKSGGNKKSDGVKESSESTNTTIEDEDTKVRKQEIIKVTEQLIEAISNGDFESYTK MCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKPV
Host	Mouse
Reactivity	Human
Isotype	lgG2b Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.29 KDa).
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

Western Blot (Recombinant protein)

Protocol Download

Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CAMK2A is approximately 1ng/ml as a capture antibody.

Protocol Download

ELISA

Product Information



• In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between ACTN1 and CAMK2A. HeLa cells were stained with anti-ACTN1 rabbit purified polyclonal 1:1200 and anti-CAMK2A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Immunofluorescence

Immunofluorescence of monoclonal antibody to CAMK2A on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — CAMK2A	
Entrez GenelD	<u>815</u>
GeneBank Accession#	BC040457
Protein Accession#	AAH40457
Gene Name	CAMK2A
Gene Alias	CAMKA, KIAA0968
Gene Description	calcium/calmodulin-dependent protein kinase II alpha
Omim ID	114078
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The product of this gene belongs to the serine/threonine protein kinases family, and to the Ca(2+)/calmodulin-dependent protein kinases subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. This calcium calmodulin-dependent protein kinase is composed of four different chains: alpha, beta, gamma, and delta. The alpha chain encoded by this gene is required for hippocampal long-term potentiation (LTP) and spatial learning. In addition to its calcium-calmodulin (CaM)-dependent activity, this protein can undergo autophosphorylation, resulting in CaM-independent activity. Two transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq
Other Designations	CaM kinase II alpha subunit CaM-kinase II alpha chain CaMK-II alpha subunit CaMKIINalpha OTT HUMP00000165787 OTTHUMP00000165788 calcium/calmodulin-dependent protein kinase (Ca M kinase) II alpha calcium/calmodulin-dependent protein kinase II alpha-B subunit

Pathway

- Calcium signaling pathway
- ErbB signaling pathway



- Glioma
- GnRH signaling pathway
- Long-term potentiation
- Melanogenesis
- Neurotrophin signaling pathway
- Olfactory transduction
- Wnt signaling pathway

Disease

- Bipolar Disorder
- Cognition
- Genetic Predisposition to Disease
- Schizophrenia
- Schizophrenic Psychology
- Tobacco Use Disorder
- Weight Gain