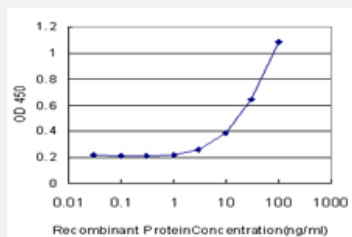


CAMK2A monoclonal antibody (M04), clone 2C11

Catalog # H00000815-M04

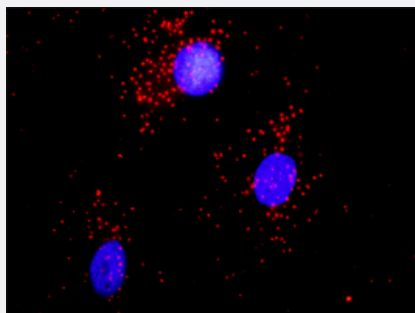
Size 100 ug

Applications



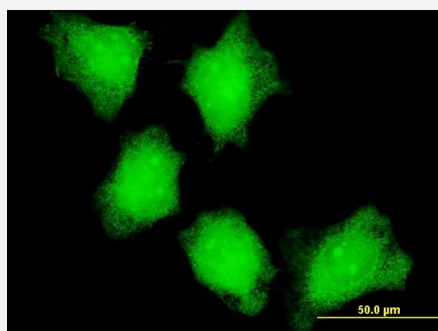
Sandwich ELISA (Recombinant protein)

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



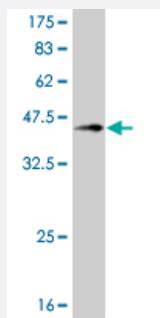
In situ Proximity Ligation Assay (Cell)

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	TTMLATRNFSGGKSGGNKKS DGVKESSESTNTTIEDEDTKVRKQEI I KVT EQLIEAISNGDFESYTK MCDPGMTAFEPEALGNLVEGLDFHRFYFENLWSRNSKPV
Host	Mouse
Reactivity	Human
Isotype	IgG2b 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

- *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 GeneID [815](#)

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 [Hyperlink](#)

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|CaMKIIalpha|OTTHUMP00000165787|OTTHUMP00000165788|calcium/calmodulin-dependent protein kinase (CaM 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](#)