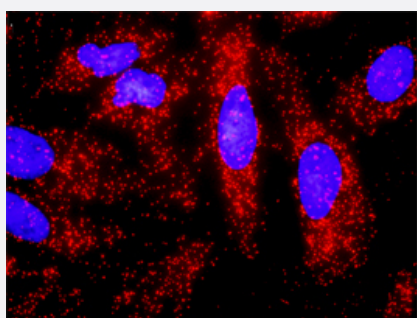


CAMK2A(phospho T286) & CAMK2A Protein Phosphorylation Antibody Pair

Catalog # DP0227 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein phosphorylation. HeLa cells were stained with dual recognition antibody pair set, rabbit polyclonal antibody 1:1200 and mouse monoclonal antibody 1:50. Each red dot represents one single phosphorylated protein. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein phosphorylation antibody pair set comes with two antibodies, one against the CAMK2A protein, and the other against the specific T286 phosphorylated site of CAMK2A for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Dual recognition immunofluorescence result.
Representative image of Proximity Ligation Assay of protein phosphorylation. HeLa cells were stained with dual recognition antibody pair set, rabbit polyclonal antibody 1:1200 and mouse monoclonal antibody 1:50. Each red dot represents one single phosphorylated protein. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:
1. Phospho-CAMK2A T286 rabbit polyclonal antibody (20 ul)
In PBS, 150 mM NaCl, pH 7.4 (0.02% sodium azide, 50% glycerol)
2. CAMK2A mouse monoclonal antibody (40 ug)
In 1x PBS, pH 7.2
*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — CAMK2A

Entrez GeneID	815
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](#)