

MARK2 (phospho Thr596) Polyclonal Antibody

Catalog No :	YP1189
Reactivity :	Human;Mouse;Rat
Applications :	IF;ELISA
Target :	MARK2
Gene Name :	MARK2
Protein Name :	Serine/threonine-protein kinase MARK2
Human Gene Id :	2011
Human Swiss Prot No :	Q7KZI7
Mouse Gene Id :	13728
Mouse Swiss Prot No :	Q05512
Rat Gene Id :	60328
Rat Swiss Prot No :	O08679
Immunogen :	The antiserum was produced against synthesized peptide derived from human MARK2 around the phosphorylation site of Thr596. AA range:562-611
Specificity :	Phospho-MARK2 (T596) Polyclonal Antibody detects endogenous levels of MARK2 protein only when phosphorylated at T596.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	88kD
Cell Pathway :	Regulation of Microtubule Dynamics
Background :	microtubule affinity regulating kinase 2(MARK2) Homo sapiens This gene encodes a member of the Par-1 family of serine/threonine protein kinases. The protein is an important regulator of cell polarity in epithelial and neuronal cells, and also controls the stability of microtubules through phosphorylation and inactivation of several microtubule-associating proteins. The protein localizes to cell membranes. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2009],
Function :	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Activated by phosphorylation on Thr-208 by STK11 in complex with STE20-related adapter-alpha (STRAD alpha) pseudo kinase and CAB39.,function:Role in epithelial morphogenesis. Modulates the developmental decision to build a columnar versus a hepatic epithelial cell apparently by promoting a switch from a direct to a transcytotic mode of apical protein delivery. Essential for the asymmetric development of membrane domains of polarized epithelial cells. One or more isoforms may play a role in graft rejection.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. MARK subfamily.,similarity:Contains 1 KA1 (kinase-associated) domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 UBA doma
Subcellular Location :	Cell membrane; Peripheral membrane protein. Cytoplasm. Lateral cell membrane. Cytoplasm, cytoskeleton. Cell projection, dendrite . Cytoplasm . Phosphorylation at Thr-596 by PRKCZ/aPKC and subsequent interaction with 14-3-3 protein YWHAZ promotes relocation from the cell membrane to the cytoplasm.
Expression :	High levels of expression in heart, brain, skeletal muscle and pancreas, lower levels observed in lung, liver and kidney.

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