

Product name:	MARK2 Rabbit Polyclonal Antibody
Cat number:	ABN13649
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MARK2. AA range:10-59
Reactivity:	Human,Mouse,Rat,Monkey
Applications:	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:10000-1:20000
Molecular Weight:	85kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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],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 domain.,subcellular location:Phosphorylated by PRKCZ in polarized epithelial cells, resulting in an interaction with YWHAZ which promotes relocation from the lateral to the apical membrane.,tissue specificity:High levels of expression in heart, brain, skeletal muscle and pancreas, lower levels observed in lung, liver and kidney.,