

Product name:	MRCK β Rabbit Polyclonal Antibody
Cat number:	ABN14082
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human MRCKB. AA range:1641-1690
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight:	194kDa
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:

This gene encodes a member of the serine/threonine protein kinase family. The encoded protein contains a Cdc42/Rac-binding p21 binding domain resembling that of PAK kinase. The kinase domain of this protein is most closely related to that of myotonic dystrophy kinase-related ROK. Studies of the similar gene in rat suggested that this kinase may act as a downstream effector of Cdc42 in cytoskeletal reorganization. [provided by RefSeq, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Maintained in an inactive, closed conformation by an interaction between the kinase domain and the negative autoregulatory C-terminal coiled-coil region. Agonist binding to the phorbol ester binding site disrupts this, releasing the kinase domain to allow N-terminus-mediated dimerization and kinase activation by transautophosphorylation.,function:May act as a downstream effector of CDC42 in cytoskeletal reorganization. Contributes to the actomyosin contractility required for cell invasion, through the regulation of MYPT1 and thus MLC2 phosphorylation.,sequence caution:Contaminating sequence. Potential poly-A sequence.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. DMPK subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 CNH domain.,similarity:Contains 1 CRIB domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 protein kinase domain.,subcellular location:Displays a dispersed punctate distribution and concentrates along the cell periphery, especially at the leading edge and cell-cell junction. This concentration is PH-domain dependent.,subunit:Homodimer and homotetramer via the coiled coil regions. Interacts tightly with GTP-bound but not GDP-bound CDC42.,tissue specificity:Expressed in all tissues examined, with high levels in heart, brain, placenta and lung.,