

Product name:	MRCK α Rabbit Polyclonal Antibody
Cat number:	ABN14081
Conjugate:	Unconjugated
Size:	100 μ L
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the Internal region of human MRCK α . AA range: 580-660
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight:	200kDa
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:

The protein encoded by this gene is a member of the Serine/Threonine protein kinase family. This kinase contains multiple functional domains. Its kinase domain is highly similar to that of the myotonic dystrophy protein kinase (DMPK). This kinase also contains a Rac interactive binding (CRIB) domain, and has been shown to bind CDC42. It may function as a CDC42 downstream effector mediating CDC42 induced peripheral actin formation, and promoting cytoskeletal reorganization. Multiple alternatively spliced transcript variants have been described, and the full-length nature of two of them has been reported. [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., 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: Abundant in the heart, brain, skeletal muscle, kidney, and pancreas, with little or no expression in the lung and liver.,