



# MRCK $\beta$ Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-14863
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	CDC42BPB
<b>Protein Name</b>	Serine/threonine-protein kinase MRCK beta
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MRCKB. AA range:1641-1690
<b>Specificity</b>	MRCK $\beta$ Monoclonal Antibody detects endogenous levels of MRCK $\beta$ protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CDC42BPB; KIAA1124; Serine/threonine-protein kinase MRCK beta; CDC42-binding protein kinase beta; CDC42BP-beta; DMPK-like beta; Myotonic dystrophy kinase-related CDC42-binding kinase beta; MRCK beta; Myotonic dystrophy protein kinase-like b
<b>Observed Band</b>	194kD
<b>Cell Pathway</b>	Cytoplasm . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell junction . Cell projection, lamellipodium . 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 (By similarity). Detected at the leading edge of migrating cells. Localization at the leading edge of migrating cells requires interaction with catalytically active CDC42 (PubMed:21240187). Localizes in the lamellipodium in a FAM89B/LRAP25-dependent manner (By similarity). .
<b>Tissue Specificity</b>	Expressed in all tissues examined, with high levels in heart, brain, placenta and lung.
<b>Function</b>	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: Conta

#### 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],

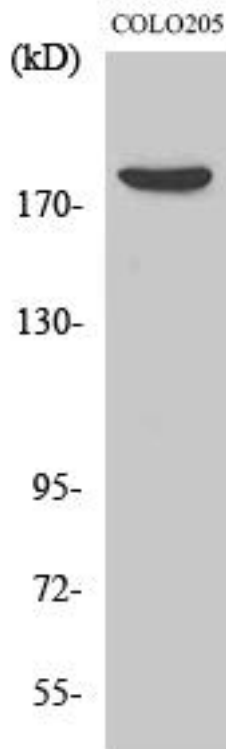
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using MRCK  $\beta$  Monoclonal Antibody