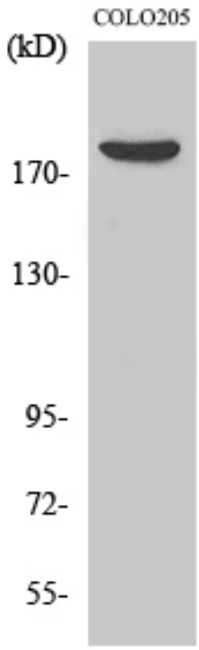
MRCKβ Polyclonal Antibody

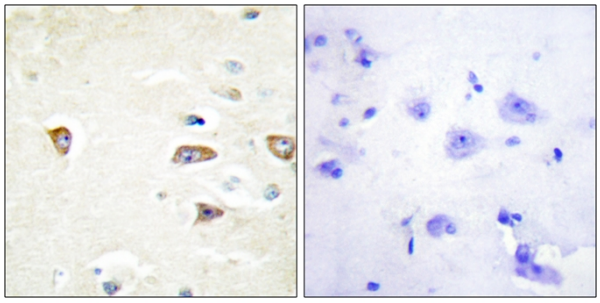
Catalog No	BYab-14863
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CDC42BPB
Protein Name	Serine/threonine-protein kinase MRCK beta
Immunogen	The antiserum was produced against synthesized peptide derived from human MRCKB. AA range:1641-1690
Specificity	MRCKβ Polyclonal Antibody detects endogenous levels of MRCKβ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	194kD
Cell Pathway	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). .
Tissue Specificity	Expressed in all tissues examined, with high levels in heart, brain, placenta and lung.

Function	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.

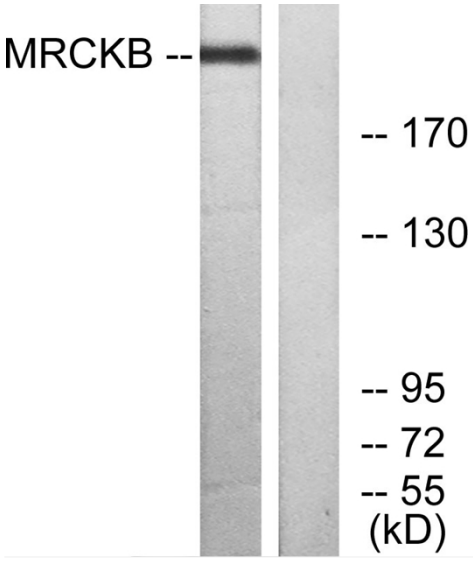
Products Images



Western Blot analysis of various cells using MRCKβ Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using MRCKB Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO cells, using MRCKB Antibody. The lane on the right is blocked with the synthesized peptide.