



MRCK α Polyclonal Antibody

Catalog No	YP-Ab-14862
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA;IHC
Gene Name	CDC42BPA
Protein Name	Serine/threonine-protein kinase MRCK alpha
Immunogen	Synthesized peptide derived from the Internal region of human MRCK α . AA range: 580-660
Specificity	MRCK α Polyclonal Antibody detects endogenous levels of MRCK α 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 1:500-2000;IHC-p 1:50-300; ELISA 2000-20000
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	CDC42BPA; KIAA0451; Serine/threonine-protein kinase MRCK alpha; CDC42-binding protein kinase alpha; DMPK-like alpha; Myotonic dystrophy kinase-related CDC42-binding kinase alpha; MRCK alpha; Myotonic dystrophy protein kinase-like alpha
Observed Band	200kD
Cell Pathway	Cytoplasm . 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. Localizes in the lamellipodium in a FAM89B/LRAP25-dependent manner. .
Tissue Specificity	Abundant in the heart, brain, skeletal muscle, kidney, and pancreas, with little or no expression in the lung and liver.
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.,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

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],

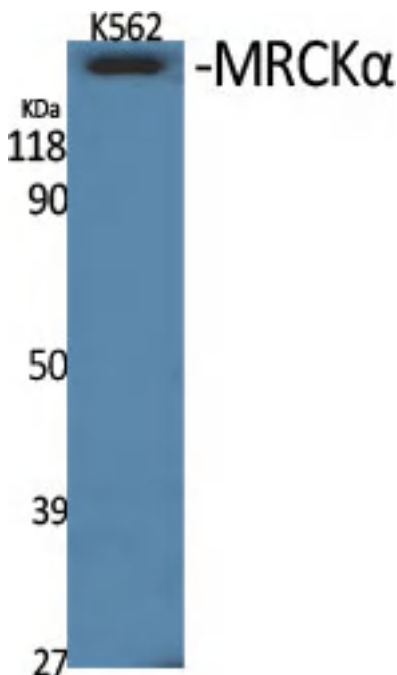
matters needing attention

Avoid repeated freezing and thawing!

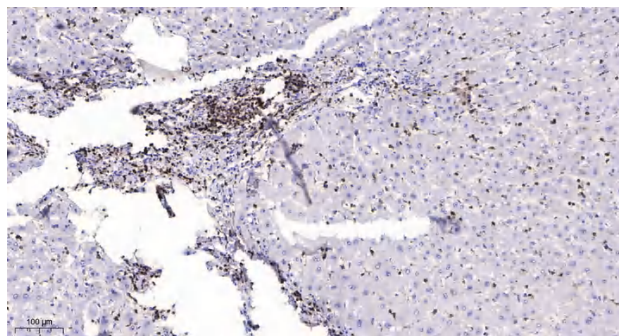
Usage suggestions

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 α Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).