

**MRCK alpha Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51062**

**Specification**

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**MRCK alpha Antibody - Product Information**

Application	<b>WB, E</b>
Primary Accession	<a href="#">O5VT25</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>197 KDa</b>

**MRCK alpha Antibody - Additional Information**

**Gene ID** 8476

**Other Names**

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, CDC42BPA {ECO:0000312|EMBL:CAH713361}, KIAA0451

**Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MRCK alpha. The exact sequence is proprietary.

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**MRCK alpha Antibody - Protein Information**

**Name** CDC42BPA {ECO:0000312|EMBL:CAH71336.1}

**Synonyms** KIAA0451

**Function**

Serine/threonine-protein kinase which is an important downstream effector of CDC42 and plays a role in the regulation of cytoskeleton reorganization and cell migration (PubMed:<a href="http://www.uniprot.org/citations/15723050" target="\_blank">15723050</a>, PubMed:<a href="http://www.uniprot.org/citations/9092543" target="\_blank">9092543</a>, PubMed:<a href="http://www.uniprot.org/citations/9418861" target="\_blank">9418861</a>). Regulates actin

cytoskeletal reorganization via phosphorylation of PPP1R12C and MYL9/MLC2 (PubMed:<a href="http://www.uniprot.org/citations/21457715" target="\_blank">21457715</a>). In concert with MYO18A and LURAP1, is involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration (PubMed:<a href="http://www.uniprot.org/citations/18854160" target="\_blank">18854160</a>). Phosphorylates: PPP1R12A, LIMK1 and LIMK2 (PubMed:<a href="http://www.uniprot.org/citations/11340065" target="\_blank">11340065</a>, PubMed:<a href="http://www.uniprot.org/citations/11399775" target="\_blank">11399775</a>). May play a role in TFRC-mediated iron uptake (PubMed:<a href="http://www.uniprot.org/citations/20188707" target="\_blank">20188707</a>). In concert with FAM89B/LRAP25 mediates the targeting of LIMK1 to the lamellipodium resulting in its activation and subsequent phosphorylation of CFL1 which is important for lamellipodial F-actin regulation (By similarity). Triggers the formation of an extrusion apical actin ring required for epithelial extrusion of apoptotic cells (PubMed:<a href="http://www.uniprot.org/citations/29162624" target="\_blank">29162624</a>).

### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:O54874}. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q3UU96}. Note=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. {ECO:0000250|UniProtKB:O54874, ECO:0000250|UniProtKB:Q3UU96}

### Tissue Location

Abundant in the heart, brain, skeletal muscle, kidney, and pancreas, with little or no expression in the lung and liver.

## MRCK alpha Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## MRCK alpha Antibody - Images

## MRCK alpha Antibody - Background

Serine/threonine-protein kinase which is an important downstream effector of CDC42 and plays a role in the regulation of cytoskeleton reorganization and cell migration. Regulates actin cytoskeletal reorganization via phosphorylation of PPP1R12C and MYL9/MLC2. In concert with MYO18A and LURAP1, is involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration. Phosphorylates: PPP1R12A, LIMK1 and LIMK2. May play a role in TFRC-mediated iron uptake.

## MRCK alpha Antibody - References

Wilkinson S.,et al.Nat. Cell Biol. 7:255-261(2005).  
Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.  
Bechtel S.,et al.BMC Genomics 8:399-399(2007).

Gregory S.G.,et al.Nature 441:315-321(2006).  
Zhao Y.,et al.J. Biol. Chem. 272:10013-10020(1997).