

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

MRCK alpha Antibody - Product Information

Application	WB, E
Primary Accession	Q5VT25
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	197 KDa

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

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: [15723050](http://www.uniprot.org/citations/15723050), PubMed: [9092543](http://www.uniprot.org/citations/9092543), PubMed: [9418861](http://www.uniprot.org/citations/9418861)). Regulates actin cytoskeletal reorganization via phosphorylation of PPP1R1 $\bar{2}$ C and MYL9/MLC2 (PubMed: [21457715](http://www.uniprot.org/citations/21457715)). In concert with MYO18A and LURAP1, is involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration (PubMed: [18854160](http://www.uniprot.org/citations/18854160)). Phosphorylates: PPP1R12A, LIMK1 and LIMK2 (PubMed: [11340065](http://www.uniprot.org/citations/11340065), PubMed: [11399775](http://www.uniprot.org/citations/11399775)). May play a

role in TFRC-mediated iron uptake (PubMed:20188707). 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:29162624).

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).