

CDC42BPB / MRCKB Antibody (Phe1665)
Rabbit Polyclonal Antibody
Catalog # ALS16388**Specification****CDC42BPB / MRCKB Antibody (Phe1665) - Product Information**

Application	WB, IHC
Primary Accession	O9Y5S2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	194kDa KDa

CDC42BPB / MRCKB Antibody (Phe1665) - Additional Information**Gene ID** 9578**Other Names**

Serine/threonine-protein kinase MRCK beta, 2.7.11.1, 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 beta, CDC42BPB
{ECO:0000312|EMBL:AAD37506.1}

Target/Specificity

Human CDC42BPB

Reconstitution & Storage

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Precautions

CDC42BPB / MRCKB Antibody (Phe1665) is for research use only and not for use in diagnostic or therapeutic procedures.

CDC42BPB / MRCKB Antibody (Phe1665) - Protein Information**Name** CDC42BPB {ECO:0000312|EMBL:AAD37506.1}**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. Regulates actin cytoskeletal reorganization via phosphorylation of PPP1R12C and MYL9/MLC2 (PubMed:21457715, PubMed:21949762). In concert with MYO18A and LURAP1, is involved in modulating lamellar actomyosin retrograde flow that is crucial to cell protrusion and migration (PubMed:18854160). Phosphorylates PPP1R12A (PubMed:21457715). 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).

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction. 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 (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). {ECO:0000250|UniProtKB:O54874, ECO:0000250|UniProtKB:Q3UU96, ECO:0000269|PubMed:21240187}

Tissue Location

Expressed in all tissues examined, with high levels in heart, brain, placenta and lung.

Volume

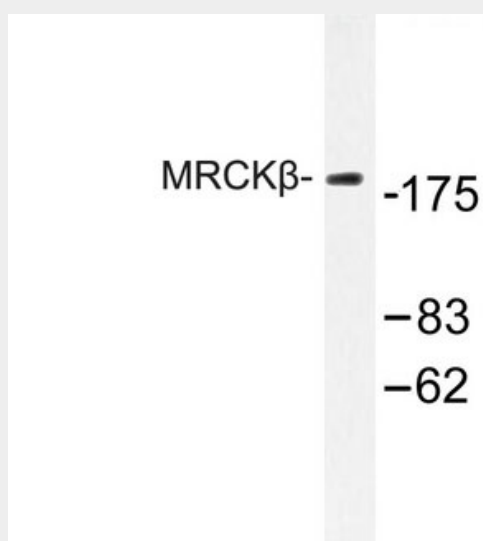
50 μ l

CDC42BPB / MRCKB Antibody (Phe1665) - Protocols

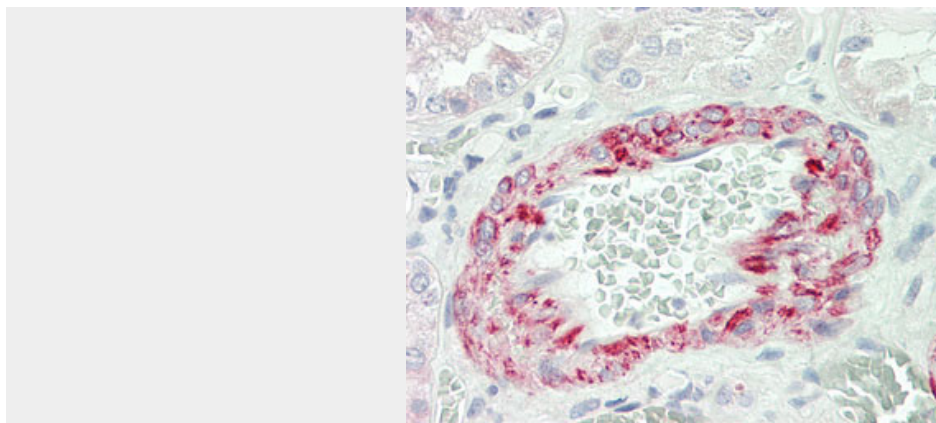
Provided below are standard protocols that you may find useful for product applications.

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

CDC42BPB / MRCKB Antibody (Phe1665) - Images



Western blot of MRCK (F1665) pAb in extracts from COLO cell.



Human Kidney, Vessel: Formalin-Fixed, Paraffin-Embedded (FFPE)

CDC42BPB / MRCKB Antibody (Phe1665) - 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.

CDC42BPB / MRCKB Antibody (Phe1665) - References

- Moncrieff C.L.,et al.Genomics 57:297-300(1999).
- Hirosawa M.,et al.DNA Res. 6:329-336(1999).
- Nakajima D.,et al.DNA Res. 9:99-106(2002).
- Olsen J.V.,et al.Cell 127:635-648(2006).
- Tan I.,et al.Cell 135:123-136(2008).