

**CDC42BPB / MRCKB Antibody (aa1641-1690)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS15485****Specification**

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**CDC42BPB / MRCKB Antibody (aa1641-1690) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9Y5S2</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	194kDa KDa

**CDC42BPB / MRCKB Antibody (aa1641-1690) - 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**

MRCKB Antibody detects endogenous levels of total MRCKB protein.

**Reconstitution & Storage**

Store at -20°C for up to one year.

**Precautions**

CDC42BPB / MRCKB Antibody (aa1641-1690) is for research use only and not for use in diagnostic or therapeutic procedures.

**CDC42BPB / MRCKB Antibody (aa1641-1690) - 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:<a href="http://www.uniprot.org/citations/21457715" target="\_blank">21457715</a>, PubMed:<a href="http://www.uniprot.org/citations/21949762" target="\_blank">21949762</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 (PubMed:<a href="http://www.uniprot.org/citations/21457715" target="\_blank">21457715</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).

#### **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**

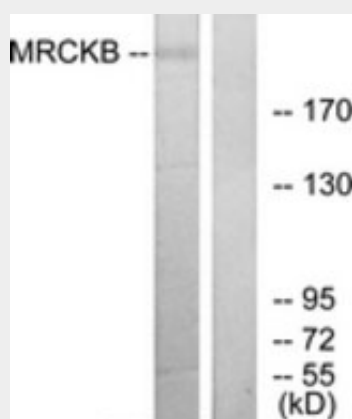
50 µl

### **CDC42BPB / MRCKB Antibody (aa1641-1690) - Protocols**

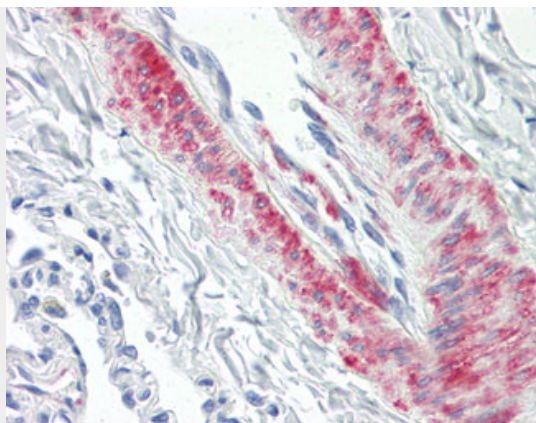
Provided below are standard protocols that you may find useful for product applications.

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

### **CDC42BPB / MRCKB Antibody (aa1641-1690) - Images**



Western blot of extracts from COLO cells, using MRCKB Antibody.



Anti-CDC42BPB antibody IHC of human lung, vessel.

#### **CDC42BPB / MRCKB Antibody (aa1641-1690) - 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 (aa1641-1690) - 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).