

MRCK β Polyclonal Antibody
Catalog # AP71011**Specification****MRCK β Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	Q9Y5S2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

MRCK β Polyclonal Antibody - Additional Information**Gene ID** 9578**Other Names**

CDC42BPB; KIAA1124; Serine/threonine-protein kinase MRCK beta; 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 b

Dilution

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

MRCK β Polyclonal Antibody - 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}

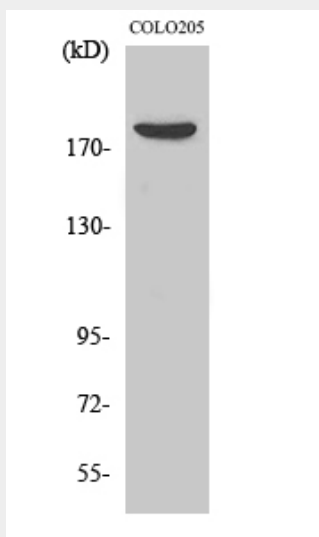
Tissue Location

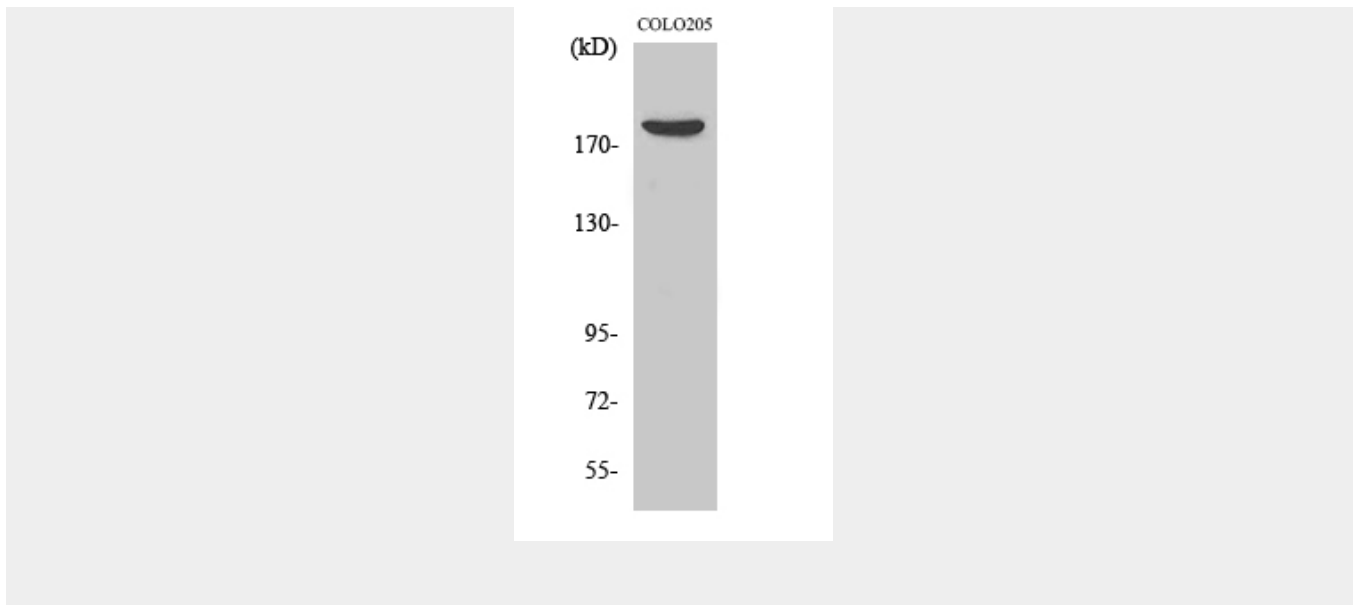
Expressed in all tissues examined, with high levels in heart, brain, placenta and lung.

MRCK β Polyclonal 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 β Polyclonal Antibody - Images



MRCKβ Polyclonal 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 (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).