

### CDC42BPA Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CDC42BPA. Catalog # AT1463a

#### **Specification**

### CDC42BPA Antibody (monoclonal) (M01) - Product Information

Application WB, E **Primary Accession O5VT25** Other Accession NM 003607 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 197307

#### CDC42BPA Antibody (monoclonal) (M01) - 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

CDC42BPA (NP\_003598, 551 a.a.  $\sim$  650 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### **Dilution**

WB~~1:500~1000

E~~N/A

## **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

#### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### **Precautions**

CDC42BPA Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

### CDC42BPA Antibody (monoclonal) (M01) - Protocols

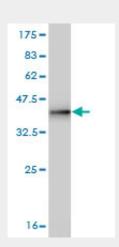
Provided below are standard protocols that you may find useful for product applications.

• Western Blot

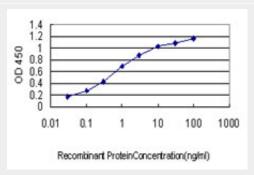


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CDC42BPA Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa).



Detection limit for recombinant GST tagged CDC42BPA is approximately 0.03ng/ml as a capture antibody.

### CDC42BPA Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is a member of the Serine/Threonine protein kinase family. This kinase contains multiple functional domains. Its kinase domain is highly similar to that of the myotonic dystrophy protein kinase (DMPK). This kinase also contains a Rac interactive binding (CRIB) domain, and has been shown to bind CDC42. It may function as a CDC42 downstream effector mediating CDC42 induced peripheral actin formation, and promoting cytoskeletal reorganization. Multiple alternatively spliced transcript variants have been described, and the full-length nature of two of them has been reported.

# CDC42BPA Antibody (monoclonal) (M01) - References

Human MRCKalpha is regulated by cellular iron levels and interferes with transferrin iron uptake. Cmejla R, et al. Biochem Biophys Res Commun, 2010 Apr 30. PMID 20188707. Characterization of the interaction of phorbol esters with the C1 domain of MRCK (myotonic dystrophy kinase-related Cdc42 binding kinase) alpha/beta. Choi SH, et al. J Biol Chem, 2008 Apr 18. PMID 18263588. Notch1





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is a p53 target gene involved in human keratinocyte tumor suppression through negative regulation of ROCK1/2 and MRCKalpha kinases. Lefort K, et al. Genes Dev, 2007 Mar 1. PMID 17344417. The DNA sequence and biological annotation of human chromosome 1. Gregory SG, et al. Nature, 2006 May 18. PMID 16710414.A novel iron responsive element in the 3'UTR of human MRCKalpha. Cmejla R, et al. Biochem Biophys Res Commun, 2006 Mar 3. PMID 16412980.