

Cdc42-binding kinase alpha Antibody (N-Term)
Peptide-affinity purified goat antibody
Catalog # AF2407a**Specification**

Cdc42-binding kinase alpha Antibody (N-Term) - Product Information

Application	IHC
Primary Accession	Q5VT25
Other Accession	NP_055641.3 , NP_003598.2 , 8476 , 226751 (mouse), 114116 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	197307

Cdc42-binding kinase alpha Antibody (N-Term) - Additional Information**Gene ID** 8476**Other Names**

Serine/threonine-protein kinase MRCK alpha, 2.7.11.1, 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:CAH71336.1}, KIAA0451

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Cdc42-binding kinase alpha Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Cdc42-binding kinase alpha Antibody (N-Term) - 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, PubMed:9418861, PubMed:9092543). Regulates actin cytoskeletal reorganization via phosphorylation of PPP1R12C and MYL9/MLC2 (PubMed: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). Phosphorylates: PPP1R12A, LIMK1 and LIMK2 (PubMed:11340065, PubMed: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

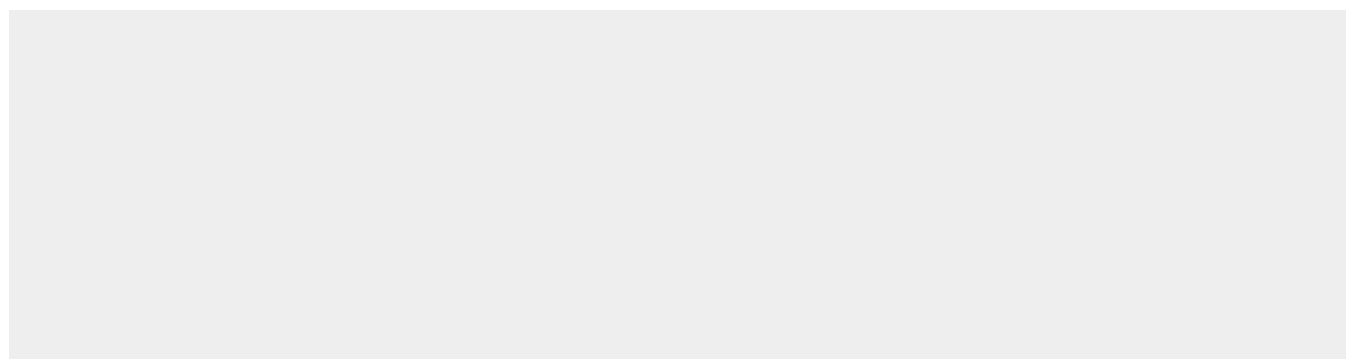
Abundant in the heart, brain, skeletal muscle, kidney, and pancreas, with little or no expression in the lung and liver.

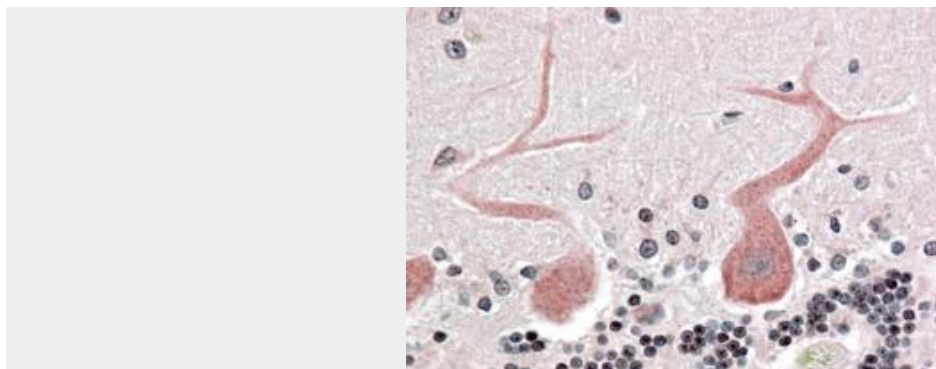
Cdc42-binding kinase alpha Antibody (N-Term) - Protocols

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](#)

Cdc42-binding kinase alpha Antibody (N-Term) - Images





AF2407a (3.8 µg/ml) staining of paraffin embedded Human Cerebellum Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Cdc42-binding kinase alpha Antibody (N-Term) - Background

This antibody is expected to recognise both reported Human isoforms (NP_055641.3 and NP_003598.2).

Cdc42-binding kinase alpha Antibody (N-Term) - References

Cloning and chromosomal location of a novel member of the myotonic dystrophy family of protein kinases. Zhao Y, Loyer P, Li H, Valentine V, Kidd V, Kraft AS. J Biol Chem. 1997 Apr 11;272(15):10013-20. PMID: 9092543