

Anti-mDia3 (Ser-196)) [conserved site], Phosphospecific Antibody
Catalog # AN1744**Specification****Anti-mDia3 (Ser-196)) [conserved site], Phosphospecific Antibody - Product Information**

Primary Accession	O9Z207
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	133686

Anti-mDia3 (Ser-196)) [conserved site], Phosphospecific Antibody - Additional InformationGene ID **56419****Other Names**

DIA3; DIAP2; DIAPH2; diaphanous formin-2; DRF2; POF2

Target/Specificity

Formins include several families of proteins that regulate actin cytoskeletal dynamics via two conserved formin homology domains, FH1 and FH2. Through cooperation of FH1 and FH2, formins construct actin-based structures comprising linear, unbranched filaments that are used in stress fibers, actin cables, microspikes, and contractile rings. A subgroup of the formins is the diaphanous (Dia) family, which includes mDia1 (Diap1), mDia2 (Diap3), and mDia3 (Diap2). mDia3 is activated by Cdc42 and regulates the attachment of microtubules to the kinetochore during mitosis. Aurora B kinase phosphorylates Ser-196 and Thr-882 in vitro, and phosphorylation of Ser-196 increases during mitosis in vivo. A multisite mutant mDia3 with nonphosphorylatable T66A, S196A, S880A and T882A leads to misalignment of chromosomes at the metaphase plate. Thus, phosphorylation may be an important regulator of mDia3 activity during mitosis.

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

Anti-mDia3 (Ser-196)) [conserved site], Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

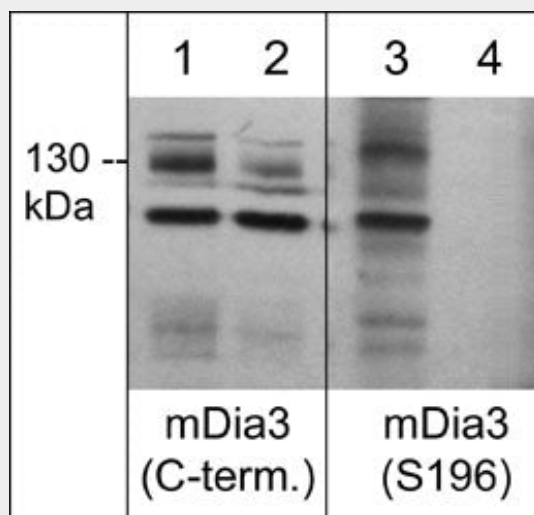
Anti-mDia3 (Ser-196)) [conserved site], Phosphospecific Antibody - Protocols

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](#)

Anti-mDia3 (Ser-196) [conserved site], Phosphospecific Antibody - Images



Western blot analysis of mDia3 expression in human Jurkat cells treated with Calyculin A (100 nM) (lanes 1-4). The blots were treated with lambda phosphatase (lanes 2 & 4), then probed with rabbit polyclonal anti-mDia3 (C-terminus; DP4511) (lanes 1 & 2) and anti-phospho-mDia3 (Ser-196; DP4521) (lanes 3 & 4).

Anti-mDia3 (Ser-196) [conserved site], Phosphospecific Antibody - Background

Formins include several families of proteins that regulate actin cytoskeletal dynamics via two conserved formin homology domains, FH1 and FH2. Through cooperation of FH1 and FH2, formins construct actin-based structures comprising linear, unbranched filaments that are used in stress fibers, actin cables, microspikes, and contractile rings. A subgroup of the formins is the diaphanous (Dia) family, which includes mDia1 (Diap1), mDia2 (Diap3), and mDia3 (Diap2). mDia3 is activated by Cdc42 and regulates the attachment of microtubules to the kinetochore during mitosis. Aurora B kinase phosphorylates Ser-196 and Thr-882 in vitro, and phosphorylation of Ser-196 increases during mitosis in vivo. A multisite mutant mDia3 with nonphosphorylatable T66A, S196A, S880A and T882A leads to misalignment of chromosomes at the metaphase plate. Thus, phosphorylation may be an important regulator of mDia3 activity during mitosis.