

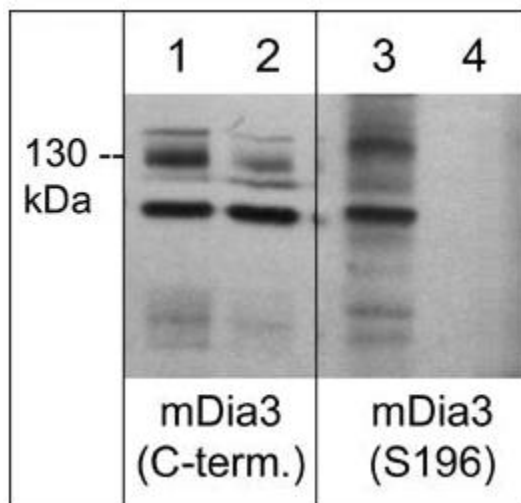
Product Datasheet

Anti-mDia3 (C-terminus) Antibody

Overview

Catalog #	DP4511
Size	100 µL
Host Species	Rabbit Polyclonal
Format	Antigen Affinity Purified
Applications	WB 1:1000
Species Tested	Human, Mouse, and Rat
Immunogen	mDia3 synthetic peptide (coupled to KLH) corresponding to amino acid residues near the C-terminus of human mDia3 (Diap2). This peptide sequence is highly conserved in rat and mouse mDia3, and has low homology to other formins.
Molecular Weight	130 kDa
Cite this Antibody	PhosphoSolutions Cat# DP4511, RRID:AB_2893317

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).

Details

Target Description	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.
Specificity	The antibody detects a 130 kDa* protein corresponding to the apparent molecular mass of mDia3 on SDS-PAGE immunoblots of human Jurkat and mouse C2C12 cells.
Quality Control	Western blots performed on each lot.
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability	After date of receipt, stable for at least 1 year at -20°C.

Significant Citations

Monzo, P., Crestani, M., Yuk Kien Chong, Ghisleni, A., Hennig, K., Li, Q., Nikolaos Kakogiannos, Giannotta, M., Richichi, C., Dini, T., Elisabetta Dejana, Maiuri, P., Martial Bolland, Sheetz, M.P., Giuliana Pelicci, Beng Ti Ang, Tang, C. and Gauthier, N.C. (2021). Adaptive mechanoproperties mediated by the formin FMN1 characterize glioblastoma fitness for invasion. *Developmental cell*, 56(20), pp.2841-2855.e8.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience **Antibodies that Work™**.

Note: For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, viewable on our website.