

#14634 Store at -20°C

Diap1 (E1E4K) Rabbit mAb



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	150	Rabbit IgG	#O60610	1729

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

Specificity / Sensitivity

Diap1 (E1E4K) Rabbit mAb recognizes endogenous levels of total Diap1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg15 of human Diap1 protein.

Background

Formins are a family of large multidomain actin nucleation/polymerization proteins characterized by their catalytic FH2 domains. The mammalian diaphanous-related formin (mDia/diap) subfamily, including mDia1/diap1, mDia2/diap3 and mDia3/diap2, are effectors of Rho family small GTPases. In response to Rho, mDia/diap proteins are involved in the regulation of multiple cell functions including cytoskeletal dynamics, migration, adhesion, polarity and cell shape (reviewed in 1,2). mDia1/diap1 is activated by GTP-bound Rho, leading to Rho-associated kinase (ROCK)-dependent stress fiber formation (3,4). Rho activation of mDia1 has also been shown to regulate serum response factor (SRF)-dependent transcription (5), and has been implicated in human cancer phenotypes such as ras-mediated transformation, metastasis and invasion (reviewed in 6). mDia3/diap2, activated by the Rho family small GTPase cdc42, regulates the attachment of microtubules to the kinetochore during mitosis in mammalian cells (7). Rho-dependent activation of mDia2/diap3 is important in assembly of the contractile ring during cytokinesis (8,9).

Background References

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- Copeland, J.W. and Treisman, R. (2002) *Mol Biol Cell* 13, 4088-99.
- Narumiya, S. et al. (2009) *Cancer Metastasis Rev* 28, 65-76.
- Yasuda, S. et al. (2004) *Nature* 428, 767-71.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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