10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DIAPH3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16587b

Specification

DIAPH3 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q9NSV4
Other Accession	NP_001035982.1, NP_112194.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**136926**
Antigen Region	**1061-1090**

DIAPH3 Antibody (C-term) - Additional Information

Gene ID 81624

Other Names
Protein diaphanous homolog 3, Diaphanous-related formin-3, DRF3, MDia2, DIAPH3, DIAP3

Target/Specificity
This DIAPH3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1061-1090 amino acids from the C-terminal region of human DIAPH3.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
DIAPH3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DIAPH3 Antibody (C-term) - Protein Information

Name DIAPH3

Synonyms DIAP3

Function Actin nucleation and elongation factor required for the assembly of F-actin structures, such as actin cables and stress fibers. Required for cytokinesis, stress fiber formation and transcriptional activation of the serum response factor. Binds to GTP-bound form of Rho and to profilin: acts in a Rho-dependent manner to recruit profilin to the membrane, where it promotes actin polymerization. DFR proteins couple Rho and Src tyrosine kinase during signaling and the regulation of actin dynamics. Also acts as an actin nucleation and elongation factor in the nucleus by promoting nuclear actin polymerization inside the nucleus to drive serum-dependent SRF-MRTFA activity.

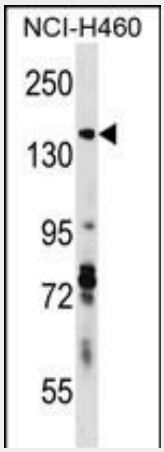
Cellular Location
Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q9Z207} Note=During mitosis, co-localizes with the actin-rich cleavage furrow and with the microtubule-rich central spindle during cytokinesis (PubMed:18755006, PubMed:19457867). Shuttles between the cytoplasm and the nucleus (By similarity). {ECO:0000250|UniProtKB:Q9Z207, ECO:0000269|PubMed:18755006, ECO:0000269|PubMed:19457867}

DIAPH3 Antibody (C-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 Cytomety
- Cell Culture

DIAPH3 Antibody (C-term) - Images



DIAPH3 Antibody (C-term) (Cat. #AP16587b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the DIAPH3 antibody detected the DIAPH3 protein (arrow).

DIAPH3 Antibody (C-term) - Background

DIAPH3 binds to GTP-bound form of Rho and to profilin. Acts in a Rho-dependent manner to recruit profilin to the membrane, where it promotes actin polymerization. It is required for cytokinesis, stress fiber formation, and transcriptional activation of the serum response factor. DFR proteins couple Rho and Src tyrosine kinase during signaling and the regulation of actin dynamics (By

similarity).

DIAPH3 Antibody (C-term) - References

DeWard, A.D., et al. J. Biol. Chem. 284(30):20061-20069(2009)
Block, J., et al. J Microsc 231(3):506-517(2008)
Beli, P., et al. Nat. Cell Biol. 10(7):849-857(2008)
Yang, C., et al. PLoS Biol. 5 (11), E317 (2007) :
Gupton, S.L., et al. J. Cell. Sci. 120 (PT 19), 3475-3487 (2007) :