

DIAPH3 Rabbit pAb

Catalog # AP97850

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9NSV4
Other Accession	Q9NSV4
Reactivity	Rat
Predicted	Human, Mouse, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	136926
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DIAPH3
Epitope Specificity	801-900/1193
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the formin homology family. Diaphanous subfamily. Contains 1 DAD (diaphanous autoregulatory) domain. Contains 1 FH1 (formin homology 1) domain. Contains 1 FH2 (formin homology 2) domain. Contains 1 GBD/FH3 (Rho GTPase-binding/formin homology 3) domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the diaphanous subfamily of the formin family. Members of this family are involved in actin remodeling and regulate cell movement and adhesion. Mutations in this gene are associated with autosomal dominant auditory neuropathy 1. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

Additional Information

Gene ID	81624
Other Names	AN; AUNA1; DIA2; DRF3; NSDAN; diap3; mDia2; DIAP3_HUMAN; DIAPH3; Diaphanous-related formin-3 (DRF3); diaphanous related formin 3; diaphanous (Drosophila, homolog) 3; auditory neuropathy, autosomal dominant 1; diaphanous homolog 3 (Drosophila)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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}

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