

DIAPH3 Antibody

Catalog No: #48533

Package Size: #48533-1 50ul #48533-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

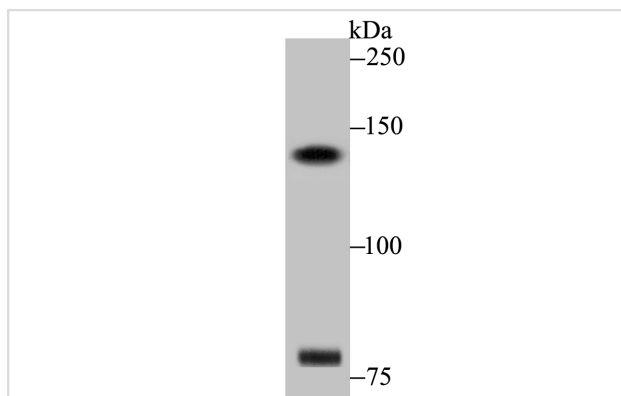
Description

Product Name	DIAPH3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Peptide affinity purified.
Applications	WB,ICC,IHC,FC
Species Reactivity	Hu, Ms
Immunogen Description	Synthetic peptide within human DIAPH3 aa 1-50.
Other Names	AN antibody AUNA1 antibody Dia2 antibody diap3 antibody DIAP3_HUMAN antibody DIAPH3 antibody Diaphanous homolog 3 (Drosophila) antibody Diaphanous homolog 3 antibody Diaphanous related formin 3 antibody Diaphanous, Drosophila, homolog of, 3 antibody Diaphanous-related formin-3 antibody DKFZp434C0931 antibody DKFZp686A13178 antibody DRF3 antibody FLJ34705 antibody mDia2 antibody NSDAN antibody OTTHUMP00000018480 antibody Protein diaphanous homolog 3 antibody RP11-26P21.1 antibody
Accession No.	Swiss-Prot#:Q9NSV4
Uniprot	Q9NSV4
GeneID	81624;
Calculated MW	137/80 kDa
Formulation	1*TBS (pH7.4), 0.5%BSA, 50%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

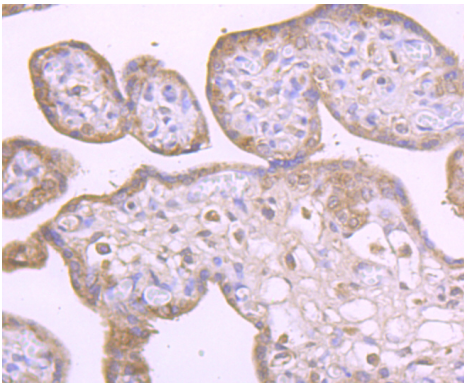
Application Details

IHC: 1:50-1:200 ICC: 1:50-1:200 FC: 1:50-1:100

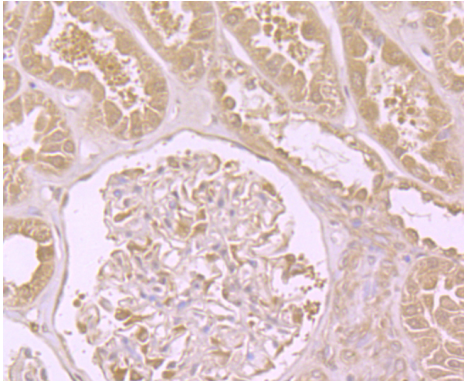
Images



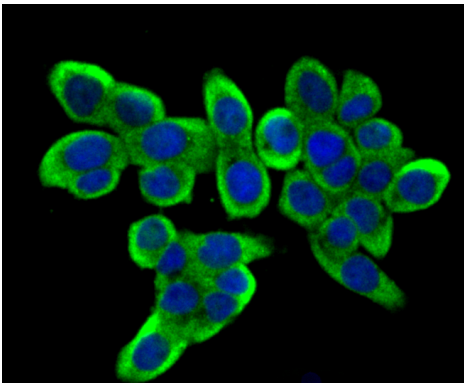
Western blot analysis of DIAPH3 on SiHa cell lysate using anti-DIAPH3 antibody at 1/500 dilution.



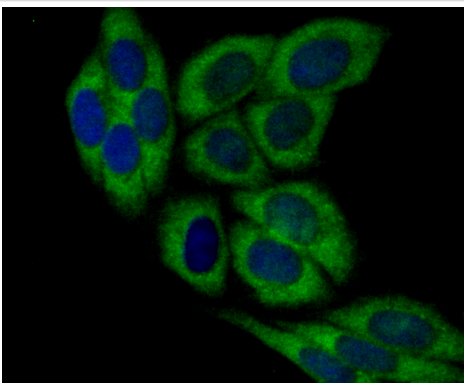
Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-DIAPH3 antibody. Counter stained with hematoxylin.



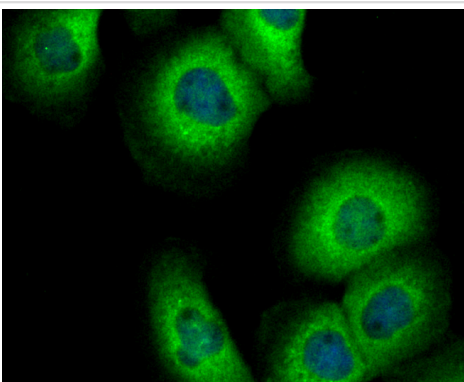
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-DIAPH3 antibody. Counter stained with hematoxylin.



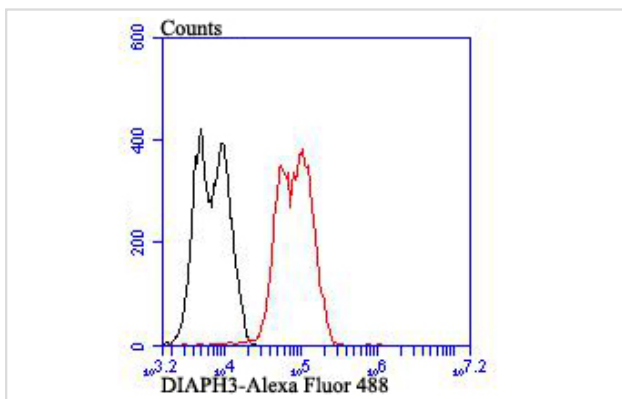
ICC staining DIAPH3 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DIAPH3 in SiHa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DIAPH3 in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of LOVO cells with DIAPH3 antibody at 1/100 dilution (red) compared with an unlabeled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Background

DIAPH3 (diaphanous homolog 3), also known as DIAP3, DRF3 or mDia2 of mouse origin, is a 1,193 amino acid member of the formin homology protein family and is required for the correct function of various cellular processes. DIAPH3 binds to both Profilin, a protein involved in cell maintenance, and to the GTP-bound form of Rho (Rho-GTP). Binding to both of these proteins allows DIAPH3 to recruit Profilin to the membrane, in a Rho-dependent manner. At the membrane, DIAPH3 promotes Actin polymerization and is required for stress fiber formation, cytokinesis and transcriptional activation of the serum response factor (SRF). DIAPH3 also regulates Actin dynamics by coupling Src tyrosine kinase (c-Src) and Rho during Actin signaling events. DIAPH3 contains one diaph-anous autoregulatory domain (DAD) and one Rho GTPase-binding domain (GBD). When DAD and GBD are intramolecularly bound, the GBD is occupied and DIAPH3 is inactive. Interruption of the DAD-GBD bond allows the GBD to bind to Rho-GTP, thus activating DIAPH3. Seven isoforms of DIAPH3 exist due to alternative splicing events.

References

Note: This product is for in vitro research use only