

[KD Validated] Anti-DIAPH1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

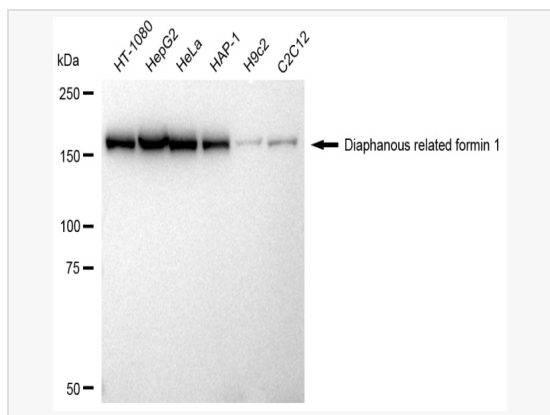
Catalog # R021881

Product Information

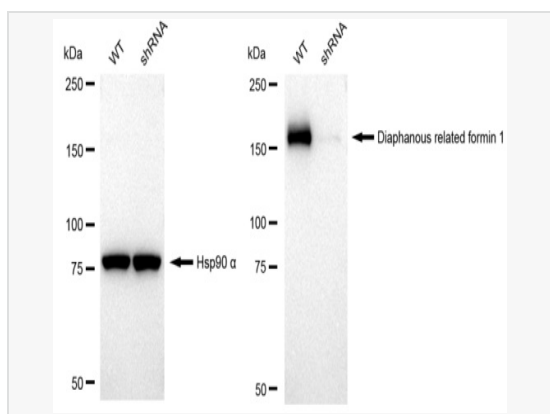
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	71Q05B45
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human DIAPH1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-DIAPH1 Rabbit mAb [71Q05B45] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

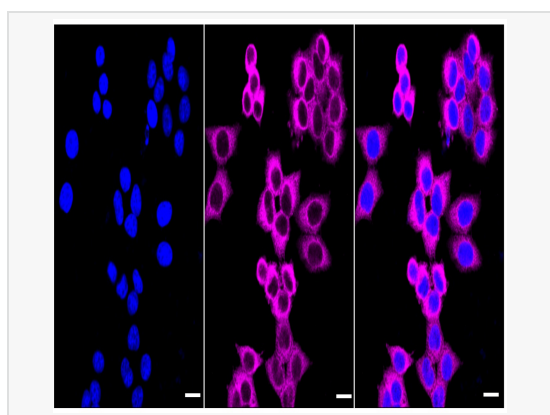
Synonyms	DIAPH1; Diaphanous Related Formin 1; HDIA1; LFHL1; Mammalian Diaphanous Related Formin 1; Protein Diaphanous Homolog 1; MDia1; DFNA1; DRF1; Diaphanous (Drosophila, Homolog) 1; Diaphanous Homolog 1 (Drosophila); Diaphanous-Related Formin-1; SCBMS; MDIA1; DIAP1; DIA1.
Calculated MW	Calculated MW: 141 kDa, Observed MW: 155 kDa
Uniprot ID	O60610
Gene ID	1729
Background	Acts in a Rho-dependent manner to recruit PFY1 to the membrane. Required for the assembly of F-actin structures, such as actin cables and stress fibers. Nucleates actin filaments. Binds to the barbed end of the actin filament and slows down actin polymerization and depolymerization. Required for cytokinesis, and transcriptional activation of the serum response factor.
Cellular Location	Cell membrane. Cell projection > ruffle membrane. Cytoplasm > cytoskeleton. Membrane ruffles, especially at the tip of ruffles, of motile cells.
Tissue Location	Expressed in brain, heart, placenta, lung, kidney, pancreas, liver, skeletal muscle and cochlea.



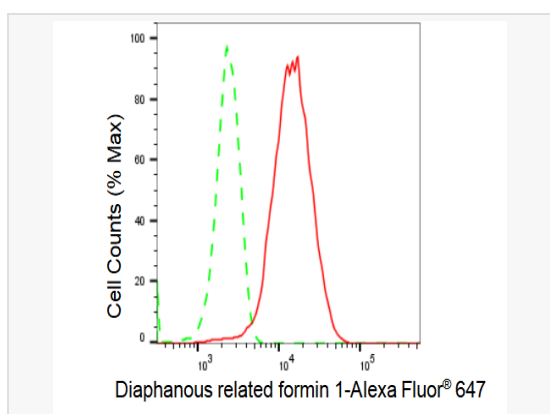
Western blotting analysis using Diaphanous related formin 1 antibody (R021881). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Diaphanous related formin 1 antibody (R021881, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



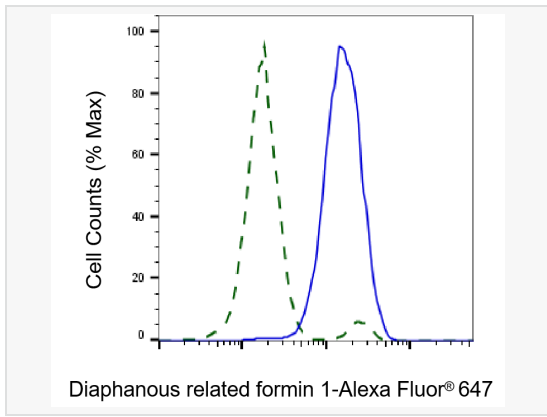
Western blotting analysis using Diaphanous related formin 1 antibody (R021881). Diaphanous related formin 1 expression in wild type (WT) and diaphanous related formin 1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Diaphanous related formin 1 antibody (R021881, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



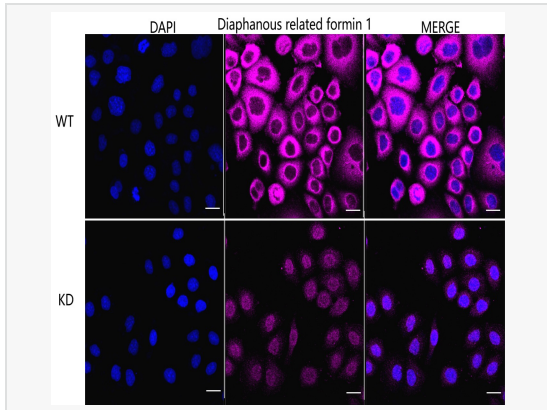
Immunocytochemical staining of HepG2 cells with Diaphanous related formin 1 antibody (R021881, 1:1,000). Nuclei were stained blue with DAPI; Diaphanous related formin 1 was stained magenta with Alexa Fluor[®] 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



Flow cytometric analysis of Diaphanous related formin 1 expression in HepG2 cells using Diaphanous related formin 1 antibody (R021881, 1:2,000). Green, isotype control; red, Diaphanous related formin 1.



Validation of Diaphanous related formin 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Diaphanous related formin 1 antibody (R021881, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using Diaphanous related formin 1 antibody (R021881, 1:1,000), Top panel: wild-type (WT); Bottom panel: Diaphanous related formin 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Diaphanous related formin 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m. Permeabilization: Triton.