
Product Name: KD-Validated Diaphanous Related Formin 1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01807**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 141.3kDa

Antigen Information

Gene Name	DIAPH1
Alternative Names	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
Gene ID	1729.0
SwissProt ID	O60610
Immunogen	A synthesized peptide derived from human DIAPH1

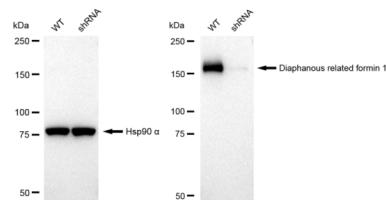
Background

This gene is a homolog of the *Drosophila* diaphanous gene, and has been linked to autosomal dominant, fully penetrant, nonsyndromic sensorineural progressive low-frequency hearing loss. Actin polymerization involves proteins known to interact with diaphanous protein in *Drosophila* and mouse. It has therefore been speculated that this gene may have a role in the regulation of actin polymerization in hair cells of the inner ear. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

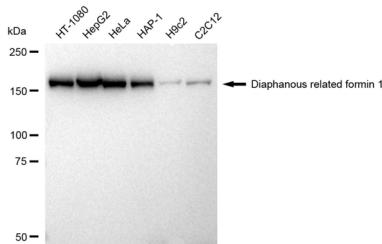
Research Area

Signal Transduction

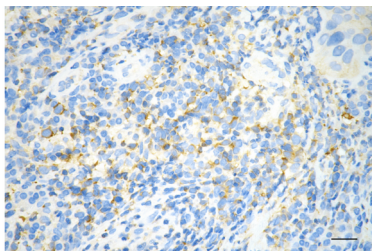
Image Data



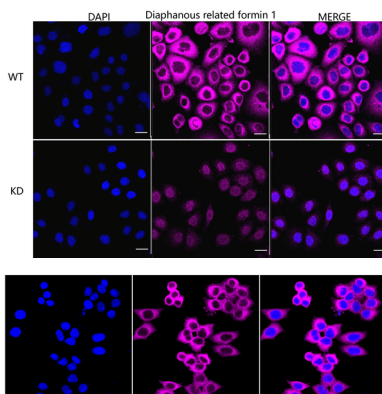
Western blotting analysis using Diaphanous related formin 1 antibody (KVA01807). Diaphanous related formin 1 expression in wild type (WT) and diaphanous related formin 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Diaphanous related formin 1 antibody (KVA01807, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Diaphanous related formin 1 antibody (KVA01807). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Diaphanous related formin 1 antibody (KVA01807, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

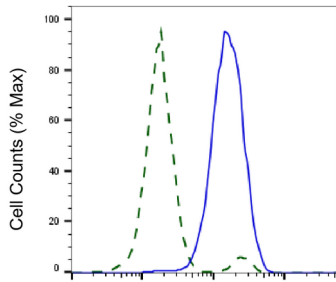


Immunohistochemistry was performed on paraffin-embedded human esophageal carcinoma using diaphanous related formin 1 antibody (KVA01807, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



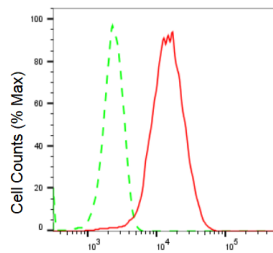
Immunocytochemical staining of HeLa cells using Diaphanous related formin 1 antibody (KVA01807, 1:1,000). Top panel: wild-type (WT); Bottom panel: Diaphanous related formin 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Diaphanous related formin 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.

Immunocytochemical staining of HepG2 cells with Diaphanous related formin 1 antibody (KVA01807, 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 µm.



Diaphanous related formin 1-Alexa Fluor® 647

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 (KVA01807, 1:2,000) and analyzed using BD flow cytometer.



Diaphanous related formin 1-Alexa Fluor® 647

Flow cytometric analysis of Diaphanous related formin 1 expression in HepG2 cells using Diaphanous related formin 1 antibody (KVA01807, 1:2,000). Green, isotype control; red, Diaphanous related formin 1.