

Anti-DIAPH1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

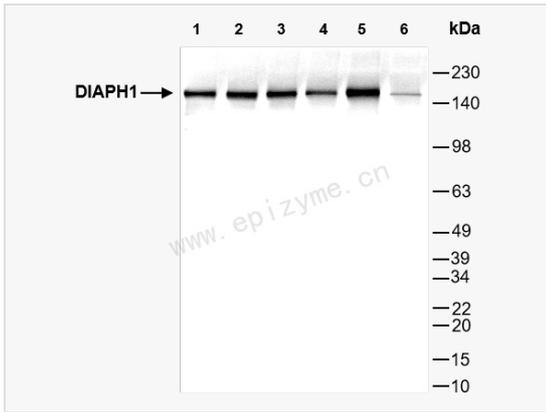
Catalog # R014580

Product Information

Application	ELISA, WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC
Reactivity	Mouse, Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	29R05K75
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human DIAPH1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-DIAPH1 Rabbit mAb [29R05K75] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	DIAPH1, deafness, autosomal dominant 1, DFNA1, DIA1, DIAP1, DIAP1_HUMAN, DIAPH1, Diaphanous homolog 1 (Drosophila), diaphanous homolog 1, Diaphanous related formin 1, Diaphanous-related formin-1, DRF1, FLJ25265, hDIA1, LFHL1, low frequency hearing loss 1, p140DIA, Protein diaphanous homolog 1.
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 Blot - Anti-DIAPH1 Rabbit mAb [29R05K75]

All lanes: R014580 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 5: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 6: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 7: Mouse small intestines whole tissue lysates

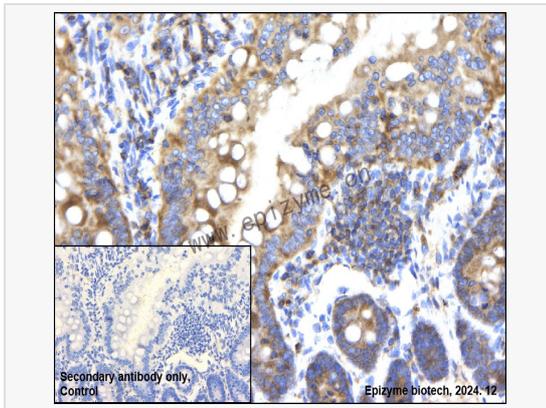
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 141 kDa

Observed band size: 155 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-DIAPH1 Rabbit mAb [29R05K75]

Sample: Paraformaldehyde-fixed, paraffin embedded rat colon tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014580 at 1:200 dilution

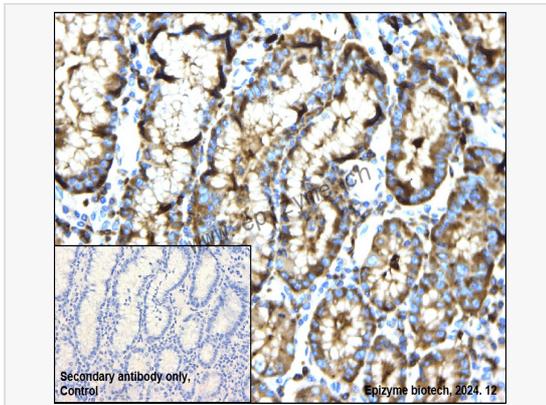
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-DIAPH1 Rabbit mAb [29R05K75]

Sample: Paraformaldehyde-fixed, paraffin embedded human gastric cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014580 at 1:200 dilution

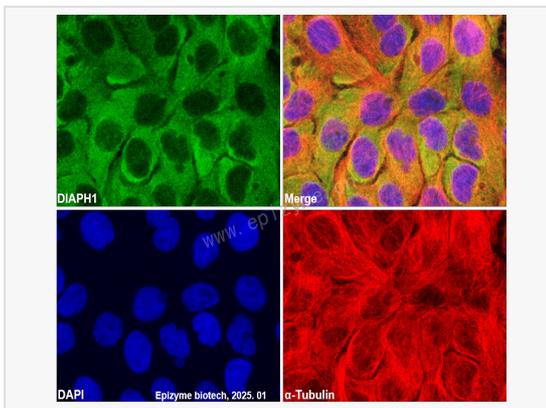
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-DIAPH1 Rabbit mAb [29R05K75]

Sample: A431 cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R014580 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).