abcam

Product datasheet

Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free ab248325

KO 評価済 リコンビナント RabMAb

画像数 9

製品の概要

製品名	Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR7948] to DIAPH1 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** IHC-P, WB, ICC/IF, Flow Cyt (Intra)
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HCT116 and 293T cell lysates' HEK-293, RAW 264.7 and Human brain lysates, PC-12 and MCF7 lysates; Flow Cyt (intra): HeLa cells; ICC/IF: HeLa cells; IHC-P: Human, rat, and mouse kidney tissue sections.
特記事項	ab248325 is the carrier-free version of **ab129167**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR7948
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab248325の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
WB		Use at an assay dependent concentration. Detects a band of approximately 150 kDa (predicted molecular weight: 141 kDa).
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

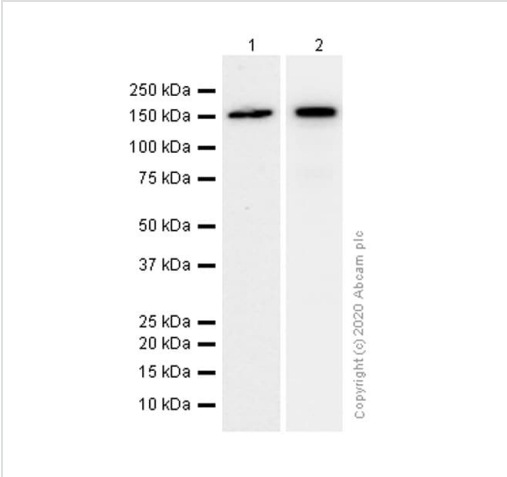
ターゲット情報

機能

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. DFR proteins couple Rho and Src tyrosine kinase during signaling and the regulation of actin dynamics. Functions as a scaffold protein for MAPRE1 and APC to stabilize microtubules and promote cell migration (By similarity). Has neurite outgrowth promoting activity (By similarity). In hear cells, it may play a role in the regulation of actin polymerization in hair cells. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and

	stabilization.
組織特異性	Expressed in brain, heart, placenta, lung, kidney, pancreas, liver, skeletal muscle and cochlea.
関連疾患	Defects in DIAPH1 are the cause of deafness autosomal dominant type 1 (DFNA1) [MIM:124900]. DFNA1 is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.
配列類似性	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.
ドメイン	DRFs are regulated by intramolecular GBD-DAD binding where Rho-GTP activates the DRFs by disrupting the GBD-DAD interaction (By similarity). DCAF7 binds to the FH2 (formin homology 2) domain.
細胞内局在	Cell membrane. Cell projection > ruffle membrane. Cytoplasm > cytoskeleton. Membrane ruffles, especially at the tip of ruffles, of motile cells.

画像



Western blot - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

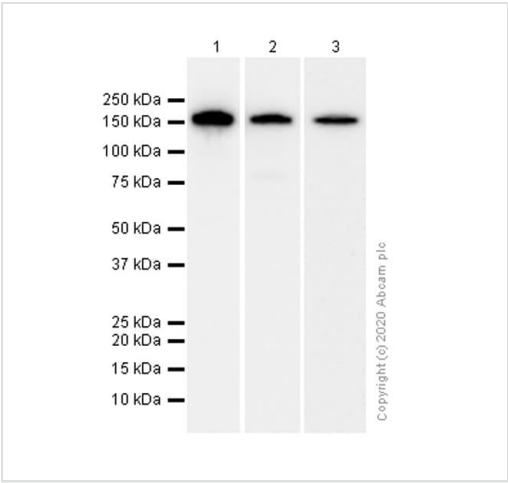
All lanes : Anti-DIAPH1 antibody [EPR7948] (**ab129167**) at 1/10000 dilution (Purified)

Lane 1 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate
Lane 2 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 141 kDa



Western blot - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

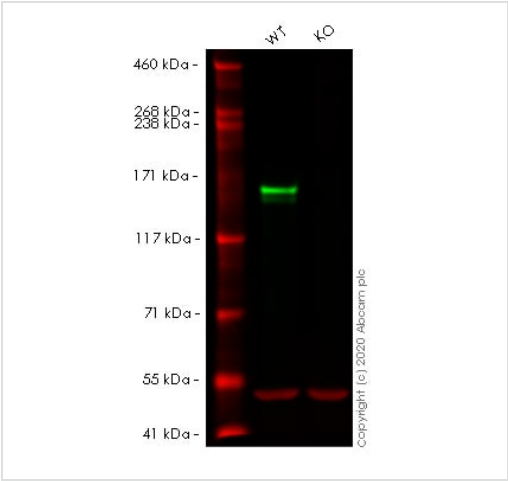
All lanes : Anti-DIAPH1 antibody [EPR7948] (**ab129167**) at 1/1000 dilution (Purified)

Lane 1 : HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate
Lane 2 : Human brain lysate
Lane 3 : RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 141 kDa



Western blot - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

All lanes : Anti-DIAPH1 antibody [EPR7948] (**ab129167**) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate
Lane 2 : DIAPH1 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

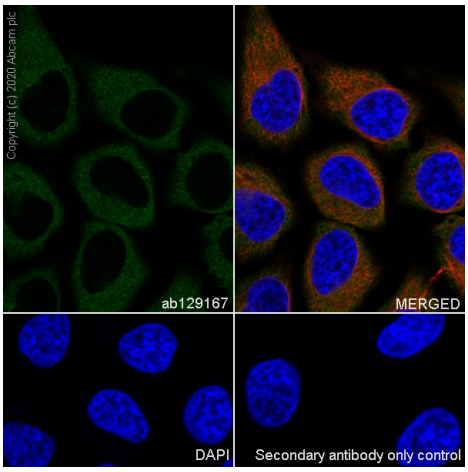
Performed under reducing conditions.

Predicted band size: 141 kDa
Observed band size: 150 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab129167**).

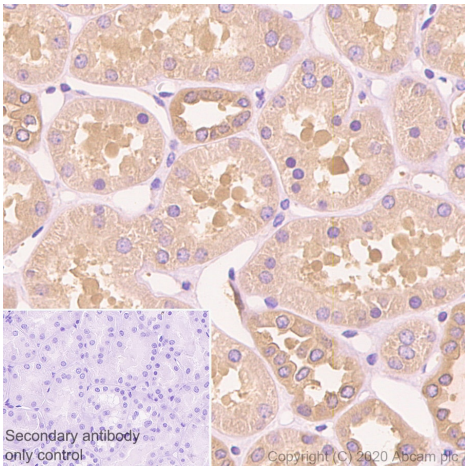
Lanes 1- 2: Merged signal (red and green). Green - **ab129167** observed at 150 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (**ab7291**) observed at 50 kDa.

ab129167 was shown to react with DIAPH1 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line **ab266120** (knockout cell lysate **ab257411**) was used. Wild-type HEK-293T and DIAPH1 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. **ab129167** and Anti-alpha Tubulin antibody [DM1A] - Loading Control (**ab7291**) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



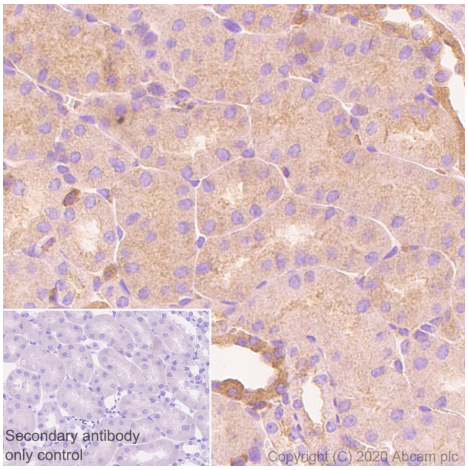
Immunocytochemistry/ Immunofluorescence - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

This data was developed using **ab129167**, the same antibody clone in a different buffer formulation.
Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling DIAPH1 with Purified **ab129167** at 1/50 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 dilution (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 dilution (2 µg/mL). DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



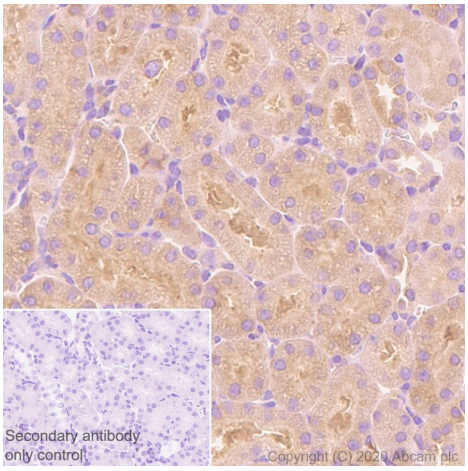
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

This data was developed using **ab129167**, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling DIAPH1 with Purified **ab129167** at 1/100 dilution (5.96 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

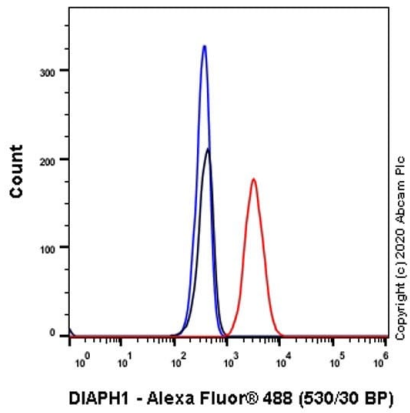
This data was developed using **ab129167**, the same antibody clone in a different buffer formulation. Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling DIAPH1 with Purified **ab129167** at 1/100 dilution (5.96 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

This data was developed using **ab129167**, the same antibody clone in a different buffer formulation.

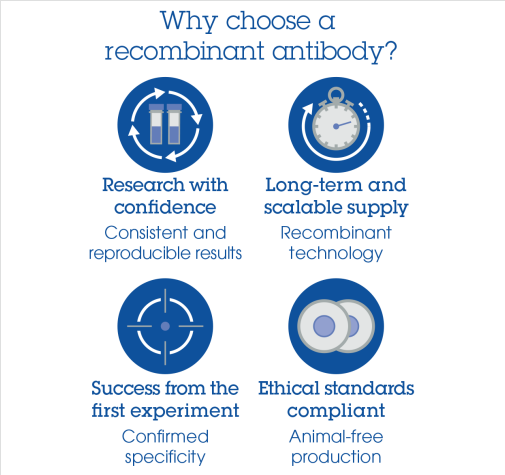
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling DIAPH1 with Purified **ab129167** at 1/100 dilution (5.96 µg/mL). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

This data was developed using **ab129167**, the same antibody clone in a different buffer formulation.

Intracellular Flow Cytometry analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling DIAPH1 with purified **ab129167** at 1/50 dilution. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/2000 was used as the secondary antibody (red). Rabbit monoclonal IgG (**ab172730**) was used as the isotype control (black). Cells without incubation with primary and secondary antibodies were used as the unlabeled control (blue).



Anti-DIAPH1 antibody [EPR7948] - BSA and Azide free (ab248325)

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