abcam

Product datasheet

Anti-DAB2 antibody [EPR22881-69] ab256524





重组 RabMAb

★★★★★ 1 Abreviews 9 图像

概述

产品名称 Anti-DAB2抗体[EPR22881-69]

描述 兔单克隆抗体[EPR22881-69] to DAB2

宿主 Rabbit

经测试应用 适用于: WB, IP, IHC-P

不适用于: Flow Cyt or ICC/IF

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: PC-3, HeLa and Caco-2 lysates. IHC-P: Human placenta, Human bladder cancer, Mouse

kidney and Rat kidney tissues. IP: HeLa cell lysate

常规说明 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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR22881-69

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab256524于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★ ☆☆ <u>(1)</u>	1/1000.
IP		1/30.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

应用说明

Is unsuitable for Flow Cyt or ICC/IF.

靶标

功能

Adapter protein that functions as clathrin-associated sorting protein (CLASP) required for clathrinmediated endocytosis of selected cargo proteins. Can bind and assemble clathrin, and binds simultaneously to phosphatidylinositol 4,5-bisphosphate (Ptdlns(4,5)P2) and cargos containg nonphosphorylated NPXY internalization motifs, such as the LDL receptor, to recruit them to clathrincoated pits. Can function in clathrin-mediated endocytosis independently of the AP-2 complex. Involved in endocytosis of integrin beta-1; this function seems to redundant with the AP-2 complex and seems to require DAB2 binding to endocytosis accessory EH domain-containing proteins such as EPS15, EPS15L1 and ITSN1. Involved in endocytosis of cystic fibrosis transmembrane conductance regulator/CFTR. Involved in endocytosis of megalin/LRP2 lipoprotein receptor during embryonal development. Required for recycling of the TGF-beta receptor. Involved in CFTR trafficking to the late endosome. Involved in several receptor-mediated signaling pathways. Involved in TGF-beta receptor signaling and facilitates phosphorylation of the signal transducer SMAD2. Mediates TFG-beta-stimulated JNK activation. May inhibit the canoniocal Wnt/betacatenin signaling pathway by stabilizing the beta-catenin destruction complex through a competing association with axin preventing its dephosphorylation through protein phosphatase 1 (PP1). Sequesters LRP6 towards clathrin-mediated endocytosis, leading to inhibition of Wnt/beta-catenin signaling. May activate non-canonical Wnt signaling. In cell surface growth factor/Ras signaling pathways proposed to inhibit ERK activation by interrupting the binding of GRB2 to SOS1 and to inhibit SRC by preventing its activating phosphorylation at 'Tyr-419'. Proposed to be involved in modulation of androgen receptor (AR) signaling mediated by SRC activation; seems to compete with AR for interaction with SRC. Plays a role in the CSF-1 signal transduction pathway. Plays a role in cellular differentiation. Involved in cell positioning and formation of visceral endoderm (VE) during embryogenesis and proposed to be required in the VE to respond to Nodal signaling coming from the epiblast. Required for the epithelial to mesenchymal transition, a process necessary for proper embryonic development. May be involved in myeloid cell differentiation and can induce macrophage adhesion and spreading. May act as a tumor suppressor.

组织特异性

Expressed in deep invaginations, inclusion cysts and the surface epithelial cells of the ovary. Also expressed in breast epithelial cells, spleen, thymus, prostate, testis, macrophages, fibroblasts, lung epithelial cells, placenta, brain stem, heart and small intestine. Expressed in kidney proximal

tubular epithelial cells (at protein level).

序列相似性 Contains 1 PID domain.

结构域 The PID domain binds to predominantly non-phosphorylated NPXY internalization motifs present

in members of the LDLR and APP family; it also mediates simultaneous binding to

phosphatidylinositol 4,5-bisphosphate.

The Asn-Pro-Phe (NPF) motifs, which are found in proteins involved in the endocytic pathway,

mediate the interaction with the EH domain of EPS15, EPS15R and ITSN1.

翻译后修饰 Phosphorylated. Phosphorylation during mitosis is leading to membrane displacement.

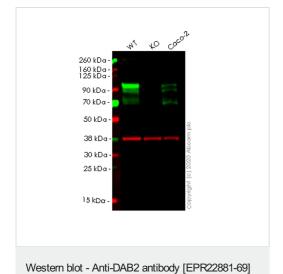
细胞定位 Cytoplasm. Cytoplasmic vesicle, clathrin-coated vesicle membrane. Membrane, clathrin-coated

pit. Colocalizes with large insert-containing isoforms of MYO6 at clathrin-coated pits/vesicles.

During mitosis is progressively displaced from the membrane and translocated to the cytoplasm.

图片

(ab256524)



All lanes: Anti-DAB2 antibody [EPR22881-69] (ab256524) at 1/1000 dilution

Lane 1: Wild-type HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2: DAB2 knockout HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3: Caco-2 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

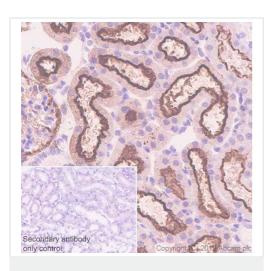
All lanes: Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Observed band size: 95 kDa

Lanes 1-3: Merged signal (red and green). Green - ab256524 observed at 95 kDa. Red - loading control ab8245 observed at 36 kDa.

ab256524 Anti-DAB2 antibody [EPR22881-69] was shown to specifically react with DAB2 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265731 (knockout cell lysate ab257910) was used. Wild-type and DAB2 knockout samples were subjected to SDS-PAGE. ab256524 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution

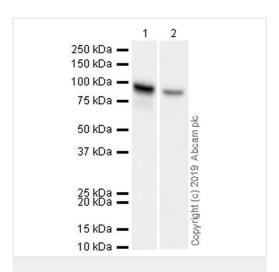
respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye $^{\$}$ 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye $^{\$}$ 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DAB2 antibody
[EPR22881-69] (ab256524)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling DAB2 with ab256524 at 1/500 dilution (0.14 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in rat kidney (PMID: 30052485) is observed. The section was incubated with ab256524 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Western blot - Anti-DAB2 antibody [EPR22881-69] (ab256524)

All lanes : Anti-DAB2 antibody [EPR22881-69] (ab256524) at 1/1000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

Lane 2: Caco-2 (human colorectal adenocarcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 95 kDa

The actual band size higher than predicted is mainly caused by phosphorylation (PMID: 28876503).

The molecular weight observed is consistent with what has been described in the literature (PMID: 24648493).

Exposure time: Lane 1: 5.5 seconds Lane 2: 15 seconds

Blocking and Diluting Buffer and concentration: 5% NFDM/TBST

1 2
250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
37 kDa —
31 t5 kDa —
110 kDa —
4 GAPDH

Western blot - Anti-DAB2 antibody [EPR22881-69] (ab256524)

All lanes : Anti-DAB2 antibody [EPR22881-69] (ab256524) at 1/1000 dilution

Lane 1 : PC-3 (human prostate adenocarcinoma epithelial cell), whole cell lysate

Lane 2 : LNCaP (human prostate carcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

Observed band size: 95 kDa

Negative control: LNCaP (PMID: 26143155).

The actual band size higher than predicted is mainly caused by phosphorylation (PMID: 28876503).

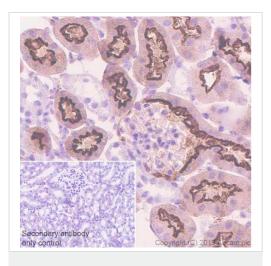
The molecular weight observed is consistent with what has been described in the literature (PMID: 24648493).

Exposure time: 15 seconds

Blocking and Diluting Buffer and concentration: 5% NFDM/TBST



Immunoprecipitation - Anti-DAB2 antibody [EPR22881-69] (ab256524)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DAB2 antibody
[EPR22881-69] (ab256524)

DAB2 was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab256524 at 1/30 dilution (2 μ g in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab256524 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate $10\mu g$

Lane 2: ab256524 IP in HeLa whole cell lysate

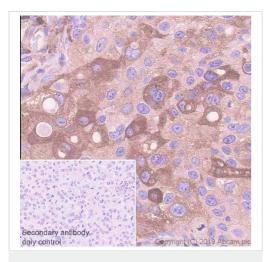
Lane 3: Rabbit monoclonal IgG ($\underline{ab172730}$) instead of $\underline{ab256490}$ in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds

Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling DAB2 with ab256524 at 1/500 dilution (0.14ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in mouse kidney (PMID: 30052485) is observed. The section was incubated with ab256524 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

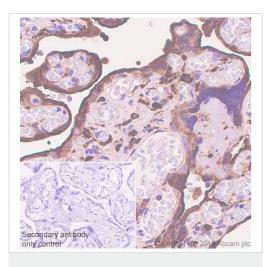
Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DAB2 antibody
[EPR22881-69] (ab256524)

Immunohistochemical analysis of paraffin-embedded Human bladder cancer tissue labeling DAB2 with ab256524 at 1/500 dilution (0.14ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human bladder cancer (PMID:17671122) is observed. The section was incubated with ab256524 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DAB2 antibody
[EPR22881-69] (ab256524)

Immunohistochemical analysis of paraffin-embedded Human placenta tissue labeling DAB2 with ab256524 at 1/500 dilution (0.14ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). Positive staining in human placenta (PMID:27072056) is observed. The section was incubated with ab256524 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control/ Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



scalable suppl Recombinant technology





Anti-DAB2 antibody [EPR22881-69] (ab256524)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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