abcam

Product datasheet

Anti-DAB2 antibody ab88590

1 References 4 Images

Overview

Product name	Anti-DAB2 antibody
Description	Mouse polyclonal to DAB2
Host species	Mouse
Tested applications	**Suitable for:** WB, ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant full length protein within Human DAB2 aa 1-800. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituent: 100% PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab88590 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 82 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

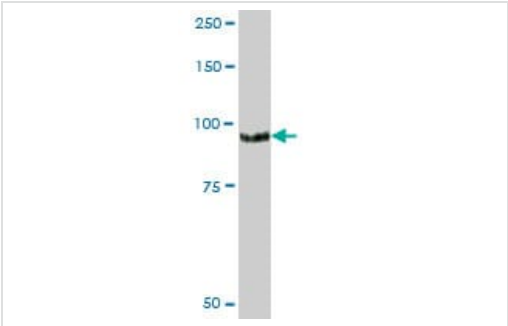
Target

Function	Adapter protein that functions as clathrin-associated sorting protein (CLASP) required for clathrin-mediated endocytosis of selected cargo proteins. Can bind and assemble clathrin, and binds simultaneously to phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2) and cargos containg non-phosphorylated NPXY internalization motifs, such as the LDL receptor, to recruit them to clathrin-coated 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/beta-catenin 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.
Tissue specificity	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).
Sequence similarities	Contains 1 PID domain.
Domain	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.
Post-translational	Phosphorylated. Phosphorylation during mitosis is leading to membrane displacement.

modifications

Cellular localization 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.

Images

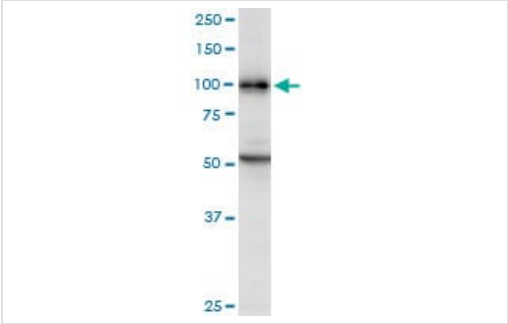


Western blot - Anti-DAB2 antibody (ab88590)

Anti-DAB2 antibody (ab88590) at 1 µg/ml + human liver tissue lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 82 kDa
Observed band size: 82 kDa

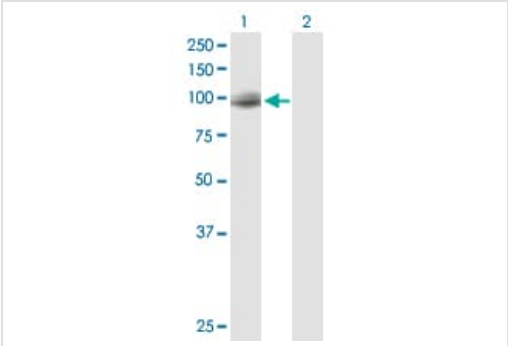


Western blot - Anti-DAB2 antibody (ab88590)

Anti-DAB2 antibody (ab88590) at 1 µg/ml + HeLa cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 82 kDa
Observed band size: 100 kDa
Additional bands at: 55 kDa. We are unsure as to the identity of these extra bands.



Western blot - Anti-DAB2 antibody (ab88590)

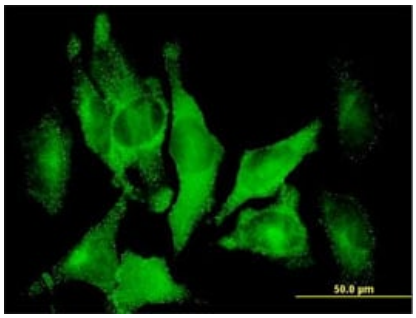
All lanes : Anti-DAB2 antibody (ab88590) at 1 µg/ml

Lane 1 : cell lysate from DAB2 transfected 293T cells
Lane 2 : cell lysate from non transfected 293T cells

Lysates/proteins at 25 µg per lane.

Developed using the ECL technique.

Predicted band size: 82 kDa
Observed band size: 95 kDa



Immunocytochemistry/ Immunofluorescence - Anti-DAB2 antibody (ab88590)

ab88590 at 10 µg/ml detecting DAB2 in HeLa cells by immunofluorescence.

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

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