abcam

Product datasheet

Anti-VPS24 antibody [EPR12821] ab175930

Recombinant RabMAb

2 References 6 Images

Overview

Product name Anti-VPS24 antibody [EPR12821]

Description Rabbit monoclonal [EPR12821] to VPS24

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, IP, Flow Cyt (Intra)

Unsuitable for: ICC/IF

Reacts with: Human Species reactivity

Predicted to work with: Mouse, Rat

Immunogen Recombinant fragment within Human VPS24. The exact sequence is proprietary.

Database link: Q9Y3E7

Positive control 293T, HepG2, U87-MG, fetal brain lysates; human cervical carcinoma tissue, human prostate

tissue, 293T cells

General notes 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**.

Properties

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Tissue culture supernatant

1

Clone number Monoclonal EPR12821

laG

Applications

Isotype

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab175930 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		1/1000 - 1/10000. Predicted molecular weight: 29 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		1/10 - 1/100.
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

Application notes

Is unsuitable for ICC/IF.

Target

Function

Probable core component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. The MVB pathway appears to require the sequential function of ESCRT-O, -I,-II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and the budding of enveloped viruses (HIV-1 and other lentiviruses). ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4. Selectively binds to phosphatidylinositol 3,5-bisphosphate PtdIns(3,5)P2 and PtdIns(3,4)P2 in preference to other phosphoinositides tested. Involved in late stages of cytokinesis. Required for sorting/trafficking of EGF receptor.

Tissue specificity

Widely expressed. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

Sequence similarities

Belongs to the SNF7 family.

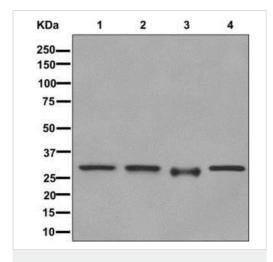
Domain

The acidic C-terminus and the basic N-terminus are thought to render the protein in a closed, soluble and inactive conformation through an autoinhibitory intramolecular interaction. The open and active conformation, which enables membrane binding and oligomerization, is achieved by interaction with other cellular binding partners, probably including other ESCRT components.

Cellular localization

Cytoplasm > cytosol. Membrane. Endosome. Late endosome membrane. Localizes to the

Images



Western blot - Anti-VPS24 antibody [EPR12821] (ab175930)

All lanes : Anti-VPS24 antibody [EPR12821] (ab175930) at 1/1000 dilution

Lane 1: 293T cell lysate

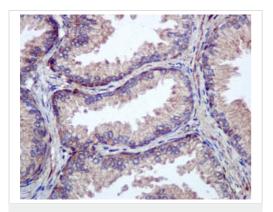
Lane 2: HepG2 cell lysate

Lane 3: U87-MG cell lysate

Lane 4: Fetal brain tissue lysate

Lysates/proteins at 10 µg per lane.

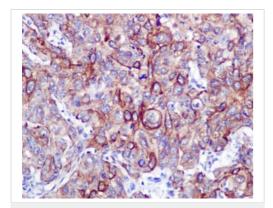
Predicted band size: 29 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VPS24 antibody
[EPR12821] (ab175930)

Immunohistochemical analysis of paraffin-embedded human prostate tissue labeling VPS24 with ab175930 at 1/50 dilution

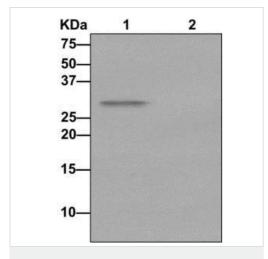
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-VPS24 antibody
[EPR12821] (ab175930)

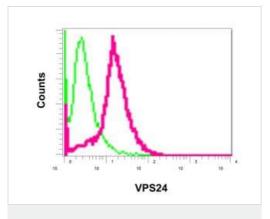
Immunohistochemical analysis of paraffin-embedded human cervical carcinoma tissue using labeling VPS24 with ab175930 at 1/50 dilution

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunoprecipitation - Anti-VPS24 antibody [EPR12821] (ab175930)

Western blot analysis on immunoprecipitation pellet from (1) HepG2 cells lysate or (2) 1X PBS (negative control) using ab175930 at 1/10 dilution, and HRP-conjugated anti-rabbit lgG preferentially detecting the non-reduced form of rabbit lgG.



Flow Cytometry (Intracellular) - Anti-VPS24 antibody [EPR12821] (ab175930)

Intracellular flow cytometric analysis of permeabilized 293T cells labeling VPS24 with ab175930 at 1/10 dilution (red) or a rabbit lgG (negative) (green).



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