abcam

Product datasheet

Anti-CHMP2B antibody ab33174



★★★★★ 6 Abreviews 37 References 画像数 3

製品の概要

製品名 Anti-CHMP2B antibody

製品の詳細 Rabbit polyclonal to CHMP2B

由来種 Rabbit

アプリケーション 適用あり: WB, ICC/IF

種交差性 交差種: Human

交差が予測される動物種: Mouse, Chicken 📤

免疫原 Synthetic peptide corresponding to Human CHMP2B aa 150 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab27782)

ポジティブ・コントロール ICC/IF: A431 cells

特記事項

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ laG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab33174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
WB	★★★★☆ (1)	Use a concentration of 1 µg/ml. Predicted molecular weight: 24 kDa.
ICC/IF	★★★★☆ (1)	Use a concentration of 5 µg/ml.

ターゲット情報

機能

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.

組織特異性

Widely expressed. Expressed in brain, heart, skeletal muscle, spleen, kidney, liver, small intestine, pancreas, lung, placenta and leukocytes. In brain, it is expressed in cerebellum, cerebral cortex, medulla, spinal chord, occipital lobe, frontal lobe, temporal lobe and putamen.

関連疾患

Defects in CHMP2B are the cause of frontotemporal dementia, chromosome 3-linked (FTD3) [MIM:600795]. FTD3 is characterized by an onset of dementia in the late 50's initially characterized by behavioral and personality changes including apathy, restlessness, disinhibition and hyperorality, progressing to stereotyped behaviors, non-fluent aphasia, mutism and dystonia, with a marked lack of insight. The brains of individuals with FTD3 have no distinctive neuropathological features. They show global cortical and central atrophy, but no beta-amyloid deposits.

配列類似性

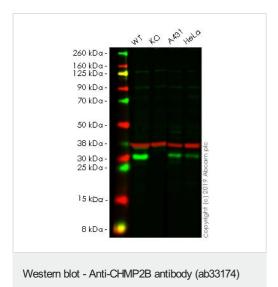
Belongs to the SNF7 family.

ドメイン

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.

細胞内局在

Cytoplasm > cytosol. Late endosome membrane.



All lanes: Anti-CHMP2B antibody (ab33174) at 1 µg/ml

Lane 1 : Wild-type A549 (Human lung carcinoma cell line) whole cell lysate

Lane 2: CHMP2B knockout A549 (Human lung carcinoma cell line) whole cell lysate

Lane 3 : A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

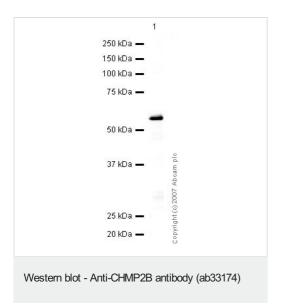
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 24 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab33174 observed at 30 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab33174 was shown to recognize CHMP2B in wild-type A549 cells as signal was lost at the expected MW in CHMP2B knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and CHMP2B knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% Milk. Ab33174 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Anti-CHMP2B antibody (ab33174) at 1 μ g/ml + Tagged recombinant CHMP2B protein at 0.1 μ g

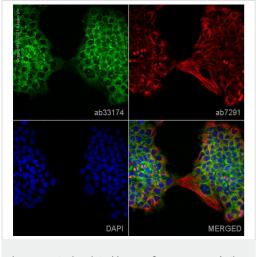
Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000

Performed under reducing conditions.

Predicted band size: 24 kDa **Observed band size:** 55 kDa

Ab33174 was tested on the full length recombinant tagged CHMP2B protein which is predicted to run at 50 kDa.



Immunocytochemistry/ Immunofluorescence - Anti-CHMP2B antibody (ab33174)

ab33174 staining CHMP2B in A431 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab33174 at 5µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.

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