abcam

Product datasheet

Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker ab50533

27 Abreviews 107 References 画像数 7

製品の概要

製品名	Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker
製品の詳細	Mouse monoclonal [Rab7-117] to RAB7 - Late Endosome Marker
由来種	Mouse
アプリケーション	**適用あり:** ICC, WB
種交差性	**交差種:** Mouse, Rat, Dog, Human **交差が予測される動物種:** Rabbit, Chicken, Cow, Xenopus laevis, Monkey
免疫原	Synthetic peptide: EQAFQTIARNALKQE , corresponding to amino acids 163-177 of Human RAB7 Run BLAST with Run BLAST with
ポジティブ・コントロール	WB: HeLA, HepG2, NRK , NIH3/T3 and MDCK cell lysates. ICC: HeLa 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: 0.097% Sodium azide Constituent: 0.0268% PBS
精製度	IgG fraction
ポリ/モノ	モノクローナル

クローン名	Rab7-117
ミエローマ	NS1
アイソタイプ	IgG2b

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ab50533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
ICC	★☆☆☆☆ (1)	Use at an assay dependent concentration.
WB	★★★★★ (18)	Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 23 kDa.

ターゲット情報

機能

Key regulator in endo-lysosomal trafficking. Governs early-to-late endosomal maturation, microtubule minus-end as well as plus-end directed endosomal migration and positioning, and endosome-lysosome transport through different protein-protein interaction cascades. Plays a central role, not only in endosomal traffic, but also in many other cellular and physiological events, such as growth-factor-mediated cell signaling, nutrient-transportor mediated nutrient uptake, neurotrophin transport in the axons of neurons and lipid metabolism. Also involved in regulation of some specialized endosomal membrane trafficking, such as maturation of melanosomes, pathogen-induced phagosomes (or vacuoles) and autophagosomes. Plays a role in the maturation and acidification of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis. Plays a role in the fusion of phagosomes with lysosomes. Plays important roles in microbial pathogen infection and survival, as well as in participating in the life cycle of viruses. Microbial pathogens possess survival strategies governed by RAB7A, sometimes by employing RAB7A function (e.g. Salmonella) and sometimes by excluding RAB7A function (e.g. Mycobacterium). In concert with RAC1, plays a role in regulating the formation of RBs (ruffled borders) in osteoclasts. Controls the endosomal trafficking and neurite outgrowth signaling of NTRK1/TRKA. Regulates the endocytic trafficking of the EGF-EGFR complex by regulating its lysosomal degradation.

組織特異性

Widely expressed; high expression found in skeletal muscle.

関連疾患

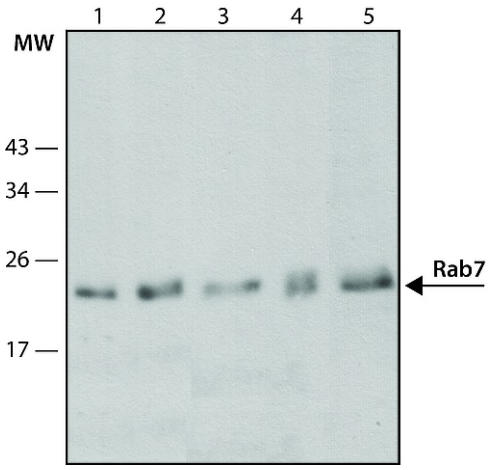
Defects in RAB7A are the cause of Charcot-Marie-Tooth disease type 2B (CMT2B) [MIM:600882]; also known as hereditary motor and sensory neuropathy II (HMSN2). CMT2B is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. CMT2B is clinically characterized by marked distal muscle weakness and a high frequency of foot ulcers, infections and amputations of the toes. CMT2B inheritance is autosomal dominant.

配列類似性

Belongs to the small GTPase superfamily. Rab family.

細胞内局在	Late endosome. Lysosome. Cytoplasmic vesicle > phagosome. Melanosome. Cytoplasmic vesicle > phagosome membrane. Co-localizes with OSBPL1A at the late endosome. Found in the ruffled border (a late endosomal-like compartment in the plasma membrane) of bone-resorbing osteoclasts. Recruited to phagosomes containing S.aureus or Mycobacterium.

画像



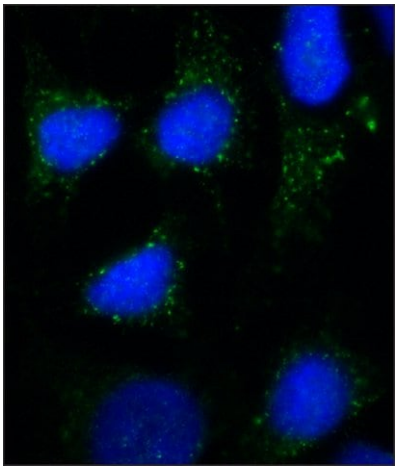
Western blot - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

All lanes : Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533) at 1 µg/ml

Lane 1 : HeLa cell lysate
Lane 2 : HepG2 cell lysate
Lane 3 : NRK (rat cell kidney line) cell lysate
Lane 4 : NIH/3T3 (mouse embryonic fibroblast cell line) cell lysate
Lane 5 : MDCK (dog kidney cell line) cell lysate

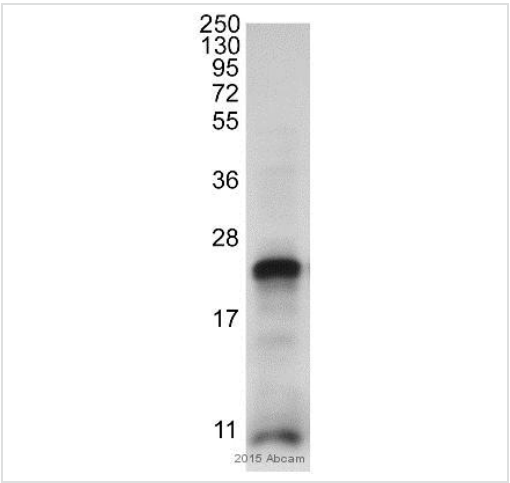
Secondary
All lanes : Goat Anti-Mouse IgG-peroxidase

Predicted band size: 23 kDa



Immunocytochemistry - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling RAB7 with ab50533 at 10 µg/mL. Cells were fixed and permeabilized with 4% paraformaldehyde followed by 0.5% saponin. Goat Anti-Mouse IgG, Atto-488 conjugate was used as the secondary antibody.



Western blot - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

This image is courtesy of an Abreview submitted by Armen Petrosyan

Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533) at 1/2000 dilution + HepG2 whole cell lysate at 1/2000 dilution

Secondary

HRP-conjugated donkey anti-mouse IgG polyclonal at 1/1 dilution

Developed using the ECL technique.

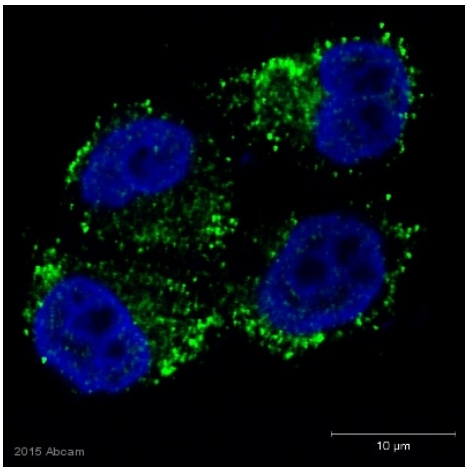
Performed under reducing conditions.

Predicted band size: 23 kDa

Exposure time: 30 seconds

Blocked with 5% milk for 1 hour at 22°C.

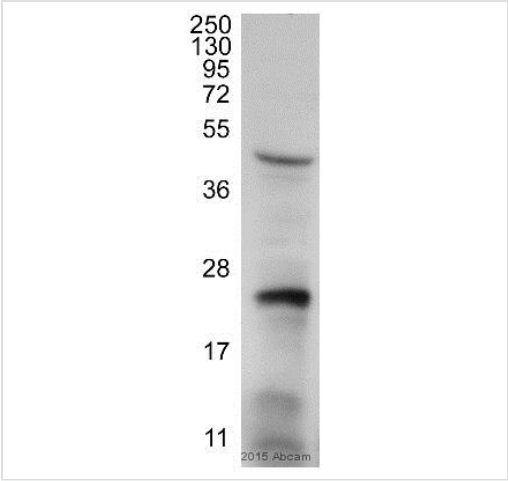
Incubated with the primary antibody for 12 hour at 4°C in PBS + 1% BSA.



Immunocytochemistry - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

This image is courtesy of an Abreview submitted by Armen Petrosyan

ab50533 staining RAB7 in HepG2 cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with 0.2% Triton X-100 and blocked with 1% serum for 1 hour at 22°C. Samples were incubated with primary antibody (1/50 in PBST + 1% donkey serum) for 3 hours at 22°C. An Alexa Fluor® 488-conjugated donkey anti-mouse IgG polyclonal (1/200) was used as the secondary antibody.



Western blot - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

This image is courtesy of an Abreview submitted by Armen Petrosyan

Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533) at 1/2000 dilution + Rat hepatocytes whole cell lysate at 20 µg

Secondary

HRP-conjugated donkey anti-mouse IgG polyclonal at 1/10000 dilution

Developed using the ECL technique.

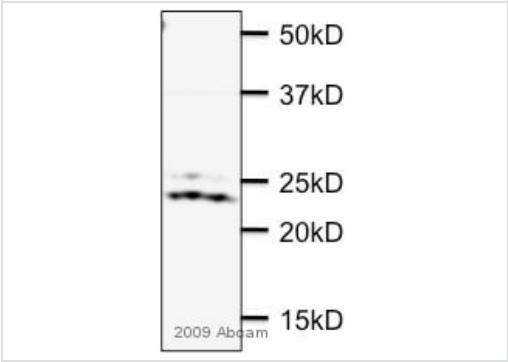
Performed under reducing conditions.

Predicted band size: 23 kDa

Exposure time: 30 seconds

Blocked with 5% milk for 1 hour at 22°C.

Incubated with the primary antibody for 12 hour at 4°C in PBS + 1% BSA.



Western blot - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

This image is a courtesy of Anonymous Abreview

Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533) at 1/1000 dilution + Lysate prepared from mouse neuroblastoma cells at 10 µg

Secondary

HRP-conjugated goat monoclonal to mouse IgG at 1/2000 dilution

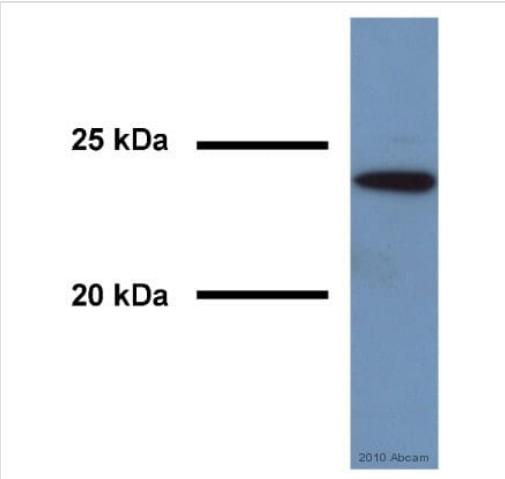
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 23 kDa

Observed band size: 23 kDa

Exposure time: 20 seconds



Western blot - Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533)

This image is courtesy of an anonymous Abreview

Anti-RAB7 antibody [Rab7-117] - Late Endosome Marker (ab50533) at 1/500 dilution (for 3 hours at 20°C) + Human brain whole tissue lysate at 15 µg

Secondary

An HRP-conjugated Goat anti-mouse IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 23 kDa

Observed band size: 24 kDa

Exposure time: 1 minute

Blocking Step: 5% Milk for 1 hour at 20°C

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