# abcam

## Product datasheet

## Anti-RAB7 antibody ab77993

★★★★★ 1 Abreviews 13 References 2 图像

#### 概述

产品名称 Anti-RAB7抗体

描述 兔多克隆抗体to RAB7

**宿主** Rabbit

经测试应用 适用于: WB, IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide, corresponding to a portion of the amino acids 90-140 of Human RAB7A

常规说明

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: PBS, 0.05% BSA

纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab77993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。

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应用	Ab评论	说明
WB		Use a concentration of 0.5 - 1 µg/ml. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).
IHC-P		Use a concentration of 10 µg/ml.

#### 靶标

#### 功能

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.

### 组织**特异性**

#### 疾病相关

Widely expressed; high expression found in skeletal muscle.

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.

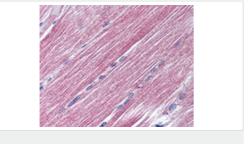
#### 序列相似性

#### 细胞定位

Belongs to the small GTPase superfamily. Rab family.

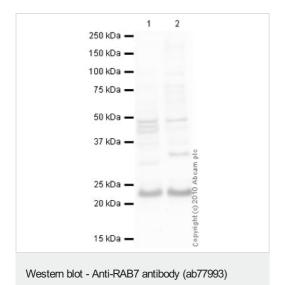
Late endosome. Lysosome. Cytoplasmic vesicle > phagosome. Melanosome. Cytoplasmic vesicle > phagosome membrane. Co-localizes with OSBPL1A at the late endosome. Found in the ruffled border (a late endosomal-like compartment in the plasma membrane) of bone-resorbing osteoclasts. Recruited to phagosomes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

#### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-RAB7 antibody (ab77993)

ab77993 at 10µg/ml staining RAB7 in human skeletal muscle tissue by Immunohistochemistry using formalin-fixed, paraffin-embedded tissue.



All lanes: Anti-RAB7 antibody (ab77993) at 1 µg/ml

Lane 1 : Human brain tissue lysate - total protein (ab29466)

Lane 2: A431 (Human epithelial carcinoma cell line) Whole Cell

Lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 23 kDa Observed band size: 23 kDa

Additional bands at: 34 kDa, 49 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 1 minute

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

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