

Recombinant Human RAB7 protein ab103507

3 References [画像数 1](#)

製品の詳細

製品名	Recombinant Human RAB7 protein
精製度	> 90 % SDS-PAGE. purified by using anion-exchange chromatography (DEAE sepharose resin) and gel-filtration chromatography (Sephacryl S-200) with 20mM Tris pH 7.5, 2mM EDTA.
発現系	Escherichia coli
アクセッション番号	<u>P51149</u>
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Human
配列	MGSSHHHHHH SSGLVPRGSH MTSRKKVLLK VIILGDSGVG KTSLMNQYVN KKFSNQYKAT IGADFLTKEV MVDDRLVTMQ IWDTAGQERF QSLGVAFYRG ADCCVLVFDV TAPNTFKTLD SWRDEFLIQA SPRDPENFPF VVLGNKIDLE NRQVATKRAQ AWCYSKNNIP YFETSAKEAI NVEQAFQTIA RNALKQETEV ELYNEFPEPI KLDKNDRAKA SAESCSC
予測される分子量	26 kDa including tags
領域	1 to 207
タグ	His tag N-Terminus

特性

Our **Abpromise guarantee** covers the use of **ab103507** in the following tested applications.

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

アプリケーション	SDS-PAGE Mass Spectrometry
質量分析	MALDI-TOF
製品の状態	Liquid

前処理および保存

保存方法および安定性

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCl, 30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

関連情報

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-transporter 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.

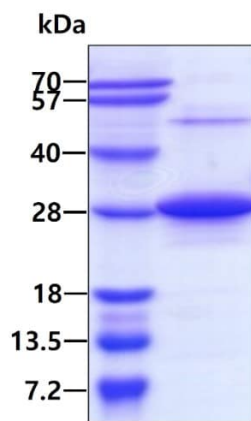
配列類似性

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



3µg by SDS-PAGE under reducing conditions and visualized by coomassie blue stain.

SDS-PAGE - Recombinant Human RAB7 protein
(ab103507)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors