

Product datasheet

Recombinant Mouse RAB10 protein (His tag) ab226423

1 Image

Description

Product name	Recombinant Mouse RAB10 protein (His tag)
Purity	> 90 % SDS-PAGE.
Expression system	Escherichia coli
Accession	<u>P61027</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse
Sequence	MAKKTYDLLFKLLLLIGDSGVGKTCVLFRRFSDDAFNTTFISTI GIDFKIKT VELQGKKIKLQWDTAGQERFHTITTSYRGAMGIMLVYDIT NGKSFENI SKWLRNIDEHANEDVERMLLGNKCDMDDKRVVPGKGE QIAREHGIRFFE TSAKANINIEKAFLTAEDILRKTPVKEPNSENVDISSGGGV TGWKSKCC
Predicted molecular weight	39 kDa including tags
Amino acids	1 to 200
Tags	His tag N-Terminus
Additional sequence information	N-terminal 6xHis-SUMO-tagged.

Specifications

Our **Abpromise guarantee** covers the use of **ab226423** in the following tested applications.

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

Applications	SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.2

Constituents: Tris buffer, 50% Glycerol (glycerin, glycerine)

General Info

Function

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (By similarity). That Rab is mainly involved in the biosynthetic transport of proteins from the Golgi to the plasma membrane. Regulates, for instance, SLC2A4/GLUT4 glucose transporter-enriched vesicles delivery to the plasma membrane. In parallel, it regulates the transport of TLR4, a toll-like receptor to the plasma membrane and therefore may be important for innate immune response. Plays also a specific role in asymmetric protein transport to the plasma membrane within the polarized neuron and epithelial cells. In neurons, it is involved in axonogenesis through regulation of vesicular membrane trafficking toward the axonal plasma membrane while in epithelial cells, it regulates transport from the Golgi to the basolateral membrane. Moreover, may play a role in the basolateral recycling pathway and in phagosome maturation. According to PubMed:23263280, may play a role in endoplasmic reticulum dynamics and morphology controlling tubulation along microtubules and tubules fusion.

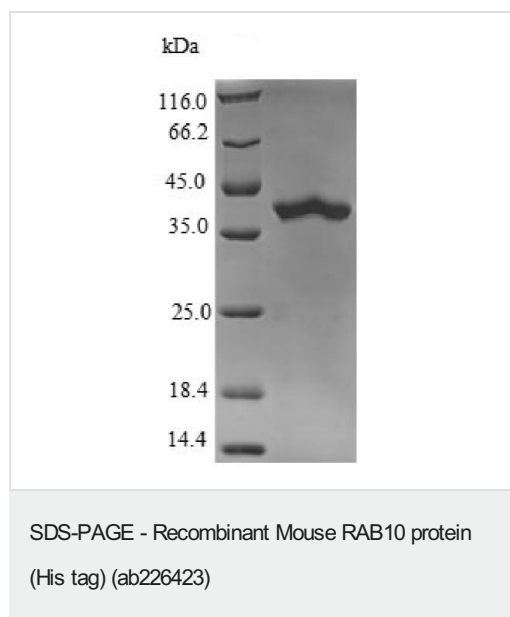
Sequence similarities

Belongs to the small GTPase superfamily. Rab family.

Cellular localization

Cytoplasmic vesicle membrane. Golgi apparatus membrane. Golgi apparatus, trans-Golgi network membrane. Endosome membrane. Recycling endosome membrane. Cytoplasmic vesicle, phagosome membrane. Cell projection, cilium. Endoplasmic reticulum membrane. Associates with SLC2A4/GLUT4 storage vesicles (PubMed:22908308). Localizes to the base of the cilium (PubMed:20576682). Transiently associates with phagosomes (By similarity). Localizes to the endoplasmic reticulum at domains of new tubule growth (PubMed:23263280).

Images



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis of ab226423 with 5% enrichment gel and 15% separation gel.

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

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