Datasheet for ABIN967882

anti-RAB5 antibody (AA 1-215)

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Overview

Quantity:	150 µg
Target:	RAB5 (RAB5A)
Binding Specificity:	AA 1-215
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RAB5 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Human Rab5 aa. 1-215
Clone:	15-Rab5
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus), Mouse (Murine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Source of all serum proteins is from USDA inspected abattoirs located in the United States. 4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	RAB5 (RAB5A)
Alternative Name:	Rab5 (RAB5A Products)
Background:	Rab5 is a low molecular weight GTP-binding protein that plays a role in endocytic vesicle traffic. Like other Rab proteins, Rab5 has C-terminal cysteine residues that are post-translationally modified by geranylgeranylation, which is critical for its membrane targeting. Rab5 is associated with early endosome and plasma membranes and evidence suggests that Rab5 is involved in regulation of early endosome fusion. The GTP/GDP cycle controls shuttling of Rab proteins between the cytosol and organelle membranes. In vitro, Rab5 proteins are removed from membranes by a GDP dissociation inhibitor protein (rabGDI) which leads to the formation of a cytosolic Rab5-rabGDI complex. Rab5 insertion into membranes is a multistep process in which a transient GDP-Rab5 intermediate is formed and converted into GTP-Rab5 that subsequently enters the acceptor membrane and releases rabGDI into the cytosol.
Molecular Weight:	25 kDA
Pathways:	Smooth Muscle Cell Migration, Regulation of long-term Neuronal Synaptic Plasticity

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:

Huang, Imamura, Olefsky: "Insulin can regulate GLUT4 internalization by signaling to Rab5 and the motor protein dynein." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 98, Issue 23, pp. 13084-9, (2001) (PubMed).

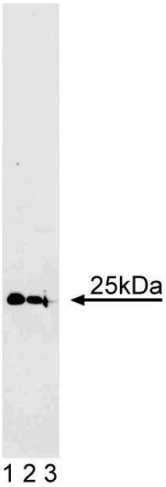
Wang, Hu, Zimmermann, Kilimann: "Rim1 and rabphilin-3 bind Rab3-GTP by composite determinants partially related through N-terminal alpha -helix motifs." in: **The Journal of biological chemistry**, Vol. 276, Issue 35, pp. 32480-8, (2001) (PubMed).

Pinkoski, Hobman, Heibein, Tomaselli, Li, Seth, Froelich, Bleackley: "Entry and trafficking of granzyme B in target cells during granzyme B-perforin-mediated apoptosis." in: **Blood**, Vol. 92, Issue 3, pp. 1044-54, (1998) (PubMed).

Li, Stahl: "Structure-function relationship of the small GTPase rab5." in: **The Journal of biological chemistry**, Vol. 268, Issue 32, pp. 24475-80, (1993) (PubMed).

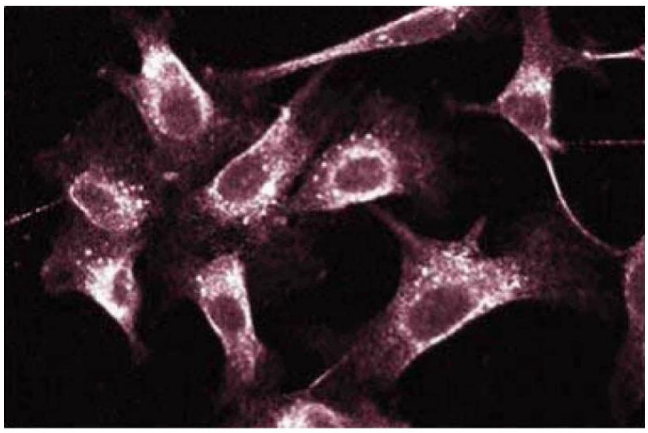
Sanford, Pan, Wessling-Resnick: "Prenylation of Rab5 is dependent on guanine nucleotide binding." in: **The Journal of biological chemistry**, Vol. 268, Issue 32, pp. 23773-6, (1993) (PubMed).

Images



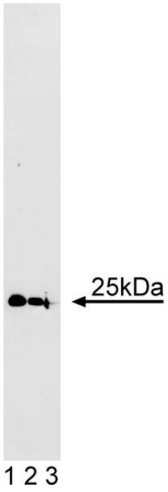
Western Blotting

Image 1. Western blot analysis of Rab5 on human endothelial cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1: 1000 dilution of anti-Rab5.



Immunofluorescence

Image 2. Immunofluorescent staining of Human Endothelial cells.



Western Blotting

Image 3.

Please check the product details page for more images. Overall 4 images are available for ABIN967882.