Datasheet for ABIN968139

anti-RAB5 antibody (AA 1-215)

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Overview

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

Product Details

Immunogen:	Human Rab5 aa. 1-215
Clone:	1-Rab5
Isotype:	IgG2a
Cross-Reactivity:	Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. 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. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	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 regulates early endosome fusion. The GTP/GDP cycle controls shuttling of Rab proteins between the cytosol and 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 may insert into membranes by a multistep process in a 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. This antibody is routinely tested by western blot analysis.
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:

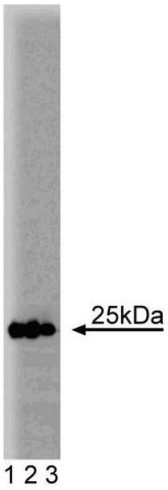
Stenmark, Vitale, Ullrich, Zerial: "Rabaptin-5 is a direct effector of the small GTPase Rab5 in endocytic membrane fusion." in: **Cell**, Vol. 83, Issue 3, pp. 423-32, (1996) (PubMed).

Ullrich, Horiuchi, Bucci, Zerial: "Membrane association of Rab5 mediated by GDP-dissociation inhibitor and accompanied by GDP/GTP exchange." in: **Nature**, Vol. 368, Issue 6467, pp. 157-60, (1994) (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).

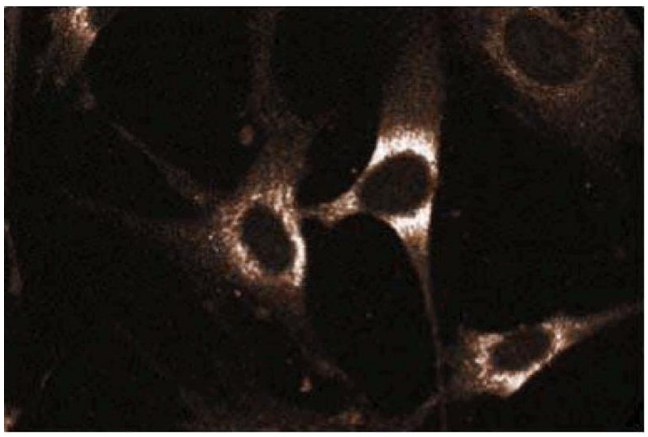
Sanford, Pan, Wessling-Resnick: "Prenylation of Rab5 is dependent on guanine nucleotide binding." in: **The Journal of biological chemistry**, Vol. 268, Issue 32, pp. 23773-6, (1993) (PubMed).

Images



Western Blotting

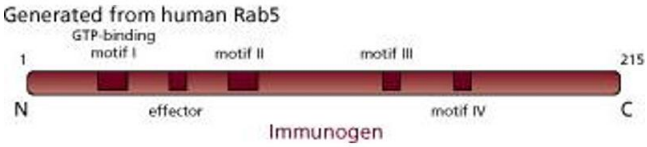
Image 1. Western blot analysis of Rab5 on a human endothelial cell lysate. Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the anti- Rab5 antibody.



Immunofluorescence

Image 2. Immunoflourescent staining on WI-38 cells.

Image 3.



Please check the product details page for more images. Overall 4 images are available for ABIN968139.