Technical Data Sheet

Purified Mouse Anti-Rab4

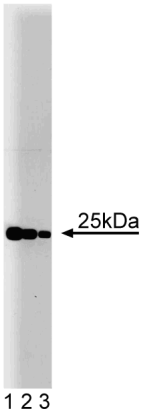
Product Information

Material Number:	**610888**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	7/Rab4
Immunogen:	Human Rab4 aa. 97-213
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Dog, Human, Mouse
Target MW:	25 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

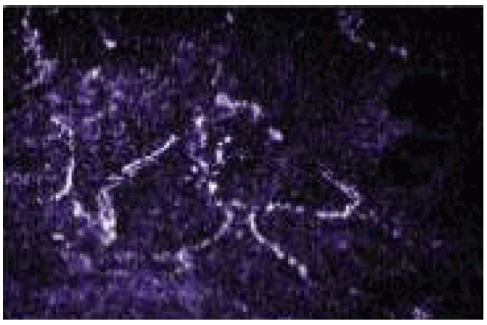
Description

The Rab proteins are small GTP-binding molecules that are localized to specific intracellular vesicles and organelles and are important for vesicular trafficking. The Rab proteins cycle between active GTP-bound and inactive GDP-bound states. Rab4 is associated with early endosomes and recycling vesicles. It is involved in the recycling of receptors to the plasma membrane and regulates membrane recycling from early endosomes. Rab4 has been reported to be membrane-bound during interphase. However, it can be found as a cytosolic protein during mitosis. It is thought that Rab4 is phosphorylated by cdc2/cyclin B during mitosis and that Ser196 on Rab4 is the recognition site of cdc2. Mutation of Ser196 results in Rab4 membrane association during mitosis in an unphosphorylated form. Together this data indicates that Rab4 is phosphorylated by cdc2 on Ser196 which releases it into the cytosol during mitosis. In addition, Rab4 may play a role in insulin-induced glucose transport into rat adipocytes. Rab4 has also been reported to be associated with vesicles that contain GLUT4, a glucose transporter isoform.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Rab4 on a rat cerebrum lysate. *Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the anti-Rab4 antibody.*



Immunofluorescence staining of L6 cells (rat skeletal muscle myoblasts; ATCC CRL-1458).

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Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Suggested Companion Products

Catalog Number	Name	Size	Clone
611463	Rat Cerebrum Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols 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.

References

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