Technical Data Sheet

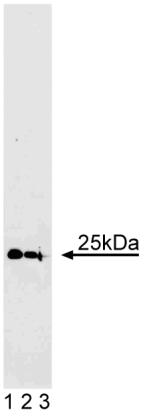
Purified Mouse Anti-Rab5

Product Information

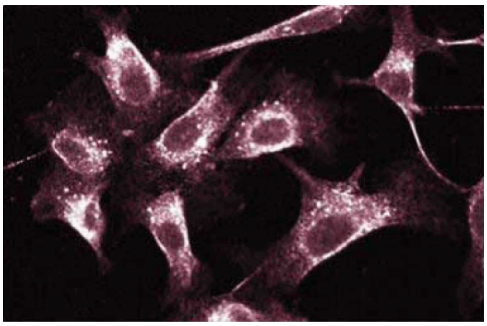
Material Number:	**610282**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	15/Rab5
Immunogen:	Human Rab5 aa. 1-215
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Rat, Mouse
Target MW:	25 kDA
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

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.



***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.*



Immunofluorescent staining of Human Endothelial cells.

Preparation and Storage

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

BD Biosciences

www.bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **www.bdbiosciences.com/how_to_order/**

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Suggested Companion Products

Catalog Number	Name	Size	Clone
611450	Human Endothelial Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	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. 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.

References

Huang J, Imamura T, Olefsky JM. Insulin can regulate GLUT4 internalization by signaling to Rab5 and the motor protein dynein. *Proc Natl Acad Sci U S A.* 2001; 98(23):13084-13089.(Clone-specific: Functional assay)

Li G, Stahl PD. Structure-function relationship of the small GTPase rab5. *J Biol Chem.* 1993; 268(32):24475-24480.(Biology)

Pinkoski MJ, Hobman M, Heibein JA. Entry and trafficking of granzyme B in target cells during granzyme B-perforin-mediated apoptosis. *Blood.* 1998; 92(3):1044-1054.(Clone-specific: Immunofluorescence)

Sanford JC, Pan Y, Wessling-Resnick M. Prenylation of Rab5 is dependent on guanine nucleotide binding. *J Biol Chem.* 1993; 268(32):23773-23776.(Biology)

Wang X, Hu B, Zimmermann B, Kilimann MW. Rim1 and rabphilin-3 bind Rab3-GTP by composite determinants partially related through N-terminal alpha -helix motifs. *J Biol Chem.* 2001; 276(35):32480-32488.(Clone-specific: Western blot)