

# Rab 6 (3G3): sc-293221

## BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies, exhibit 30-60% homology with Ras p21. Accumulating data suggests an important role for Rab proteins, either in endocytosis or in biosynthetic protein transport. The transport of newly synthesized proteins from the endoplasmic reticulum to various stacks of the Golgi complex and to secretory vesicles involves, at each stage, the movement of carrier vesicles; a process that appears to involve Rab protein function. The possibility that Rab proteins might also direct the exocytosis from secretory vesicles to the plasma membrane is supported by the observation that in yeast, the Sec4 protein, which is 40% homologous to Rab proteins, is associated with secretory vesicles. At least eight members of the Rab subfamily have been identified, each of which is found at a particular stage of a membrane transport pathway. Rab 6, also known as RAB6B, RAB6A or RAB6A, is a 208 amino acid protein that is ubiquitously expressed and is a member of the small GTPase superfamily.

## REFERENCES

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- Chen, Y., et al. 1993. Expression and localization of two low molecular weight GTP-binding proteins, Rab 8 and Rab 10, by epitope tag. *Proc. Natl. Acad. Sci. USA* 90: 6508-6512.
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## CHROMOSOMAL LOCATION

Genetic locus: RAB6A (human) mapping to 11q13.4; Rab6b (mouse) mapping to 9 F1.

## SOURCE

Rab 6 (3G3) is a mouse monoclonal antibody raised against amino acids 109-208 of Rab 6 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Rab 6 (3G3) is recommended for detection of Rab 6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rab 6 siRNA (h): sc-44063, Rab 6 siRNA (m): sc-44064, Rab 6 shRNA Plasmid (h): sc-44063-SH, Rab 6 shRNA Plasmid (m): sc-44064-SH, Rab 6 shRNA (h) Lentiviral Particles: sc-44063-V and Rab 6 shRNA (m) Lentiviral Particles: sc-44064-V.

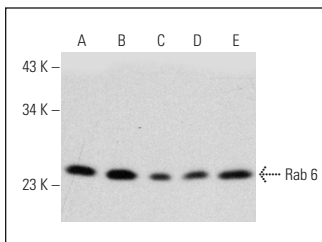
Molecular Weight of Rab 6: 25 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, HT-29 whole cell lysate: sc-364232 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



Rab 6 (3G3): sc-293221. Western blot analysis of Rab 6 expression in HL-60 (A), HT-29 (B), Jurkat (C), NIH/3T3 (D) and C6 (E) whole cell lysates.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.