## BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies. Increasing data suggests an important role for Rab proteins in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum to various stacks of the Golgi complex and to secretory vesicles involves the movement of carrier vesicles and requires Rab protein function. Rab proteins are also an integral part of endocytic pathways. Rab 38, also known as rrGTPbp or NY-MEL-1, is a melanocyte- and lung-specific member of the Rab family of proteins and localizes to the cell membrane, where it is believed to participate in melanosomal transport and docking. Rab 38 may play an important role in melanogenesis and in the targeting of TRP1, a protein involved in the production of melanin. A mutation in the gene encoding Rab 38 may result in oculocutaneous albinism (OCA), a condition in which pigment is absent from eye, skin and hair.

## CHROMOSOMAL LOCATION

Genetic locus: RAB38 (human) mapping to 11q14.2; Rab38 (mouse) mapping to 7 E 1 .

## SOURCE

Rab 38 (H-45) is a rabbit polyclonal antibody raised against amino acids 167-211 mapping at the C -terminus of Rab 38 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **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.

## APPLICATIONS

Rab $38(\mathrm{H}-45)$ is recommended for detection of Rab 38 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution $1: 50$, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rab $38(\mathrm{H}-45)$ is also recommended for detection of Rab 38 in additional species, including canine and porcine.
Suitable for use as control antibody for Rab 38 siRNA (h): sc-96475, Rab 38 siRNA (m): sc-152642, Rab 38 shRNA Plasmid (h): sc-96475-SH, Rab 38 shRNA Plasmid (m): sc-152642-SH, Rab 38 shRNA (h) Lentiviral Particles: sc-96475-V and Rab 38 shRNA (m) Lentiviral Particles: sc-152642-V.

Molecular Weight of Rab 38: 24 kDa .
Positive Controls: Rab 38 (h2): 293T Lysate: sc-174929.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker ${ }^{\top \mathrm{M}}$ compatible goat antirabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



Rab 38 (H-45): sc-292963. Western blot analysis of Rab 38 expression in non-transfected: sc-117752 (A) and human Rab 38 transfected: sc-174929 (B) 293T whole cell lysates.


Rab 38 (H-45): sc-292963. Western blot analysis of Rab 38 expression in non-transfected: sc-117752 (A) and human Rab 38 transfected: sc-174920 (B) 293T whole cell lysates.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Satisfation Guaranteed

Try Rab 38 (A-8): sc-390176 or Rab 38 (11B-7):
sc-81918, our highly recommended monoclonal alternatives to Rab 38 (H-45).

