

Rab 38 (A-8): sc-390176

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 E1.

SOURCE

Rab 38 (A-8) is a mouse monoclonal antibody raised against amino acids 167-211 mapping at the C-terminus of Rab 38 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rab 38 (A-8) is available conjugated to agarose (sc-390176 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390176 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390176 PE), fluorescein (sc-390176 FITC), Alexa Fluor® 488 (sc-390176 AF488), Alexa Fluor® 546 (sc-390176 AF546), Alexa Fluor® 594 (sc-390176 AF594) or Alexa Fluor® 647 (sc-390176 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390176 AF680) or Alexa Fluor® 790 (sc-390176 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Rab 38 (A-8) is recommended for detection of Rab 38 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

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.

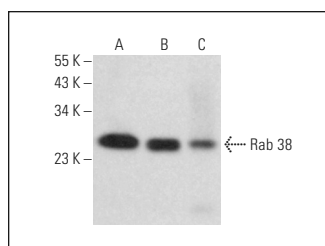
Molecular Weight of Rab 38: 24 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, C32 whole cell lysate: sc-2205 or rat liver extract: sc-2395.

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Rab 38 (A-8): sc-390176. Western blot analysis of Rab 38 expression in A-431 (A) and C32 (B) whole cell lysates and rat liver tissue extract (C).

SELECT PRODUCT CITATIONS

- Huang, M., et al. 2018. A targeted quantitative proteomic approach assesses the reprogramming of small GTPases during melanoma metastasis. *Cancer Res.* 78: 5431-5445.
- Waschbüsch, D., et al. 2019. Rab32 interacts with SNX6 and affects retromer-dependent Golgi trafficking. *PLoS ONE* 14: e0208889.
- Efferm, M., et al. 2020. Adoptive T cell therapy targeting different gene products reveals diverse and context-dependent immune evasion in melanoma. *Immunity* 53: 564-580.e9.
- Adelmann, C.H., et al. 2020. MFSD12 mediates the import of cysteine into melanosomes and lysosomes. *Nature*. E-published.

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 for detailed protocols and support products.

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