

Rab 2 (G-9): sc-133059

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the Endoplasmic reticulum (ER) 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. A member of the small Rab family and GTPase superfamily, Rab 2, which is also known as Ras-related protein Rab-2A, RAB2A, Ras-related protein Rab-2B or RAB2B, plays an essential in protein transport from the Endoplasmic reticulum to the Golgi complex.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RAB2A (human) mapping to 8q12.1, RAB2B (human) mapping to 14q11.2; Rab2a (mouse) mapping to 4 A1, Rab2b (mouse) mapping to 14 C2.

SOURCE

Rab 2 (G-9) is a mouse monoclonal antibody raised against amino acids 1-212 representing full length Rab 2A of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rab 2 (G-9) is recommended for detection of Rab 2A and Rab 2B 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); partially cross reactive with other Rab family members.

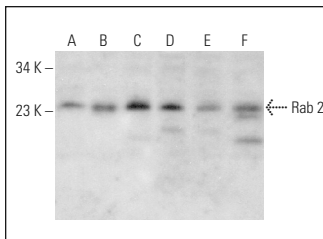
Molecular Weight of Rab 2: 24 kDa.

Positive Controls: RPE-J cell lysate: sc-24771, C6 whole cell lysate: sc-364373 or RAW 264.7 whole cell lysate: sc-2211.

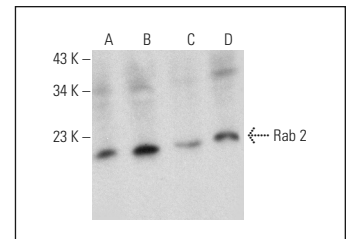
RECOMMENDED SUPPORT REAGENTS

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 2 (G-9): sc-133059. Western blot analysis of Rab 2 expression in Neuro-2A (A), EOC 20 (B), C6 (C), Raji (D), NAMALWA (E) and 3611-RF (F) whole cell lysates.



Rab 2 (G-9): sc-133059. Western blot analysis of Rab 2 expression in RAW 264.7 (A), Neuro-2A (B), C6 (C) and RPE-J (D) 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 for detailed protocols and support products.