

# Rab 8A (63-BJ): sc-81909

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: RAB8A (human) mapping to 19p13.12; Rab8a (mouse) mapping to 8 B3.3.

## SOURCE

Rab 8A (63-BJ) is a mouse monoclonal antibody raised against a C-terminal region of Rab 8A of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## PROTOCOLS

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

## APPLICATIONS

Rab 8A (63-BJ) is recommended for detection of Rab 8A 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 8A siRNA (h): sc-41828, Rab 8A siRNA (m): sc-41829, Rab 8A shRNA Plasmid (h): sc-41828-SH, Rab 8A shRNA Plasmid (m): sc-41829-SH, Rab 8A shRNA (h) Lentiviral Particles: sc-41828-V and Rab 8A shRNA (m) Lentiviral Particles: sc-41829-V.

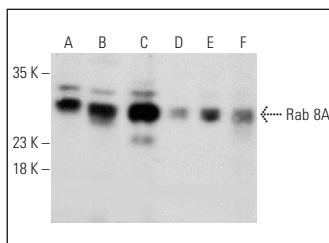
Molecular Weight of Rab 8A: 27 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, rat brain extract: sc-2392 or MDA-MB-231 cell lysate: sc-2232.

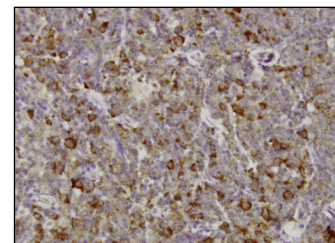
## RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Rab 8A (63-BJ): sc-81909. Western blot analysis of Rab 8A expression in HeLa nuclear extract (A), MDA-MB-231 (B) and I-11.15 (C) whole cell lysates and mouse brain (D), rat brain (E) and rat lung (F) tissue extracts.



Rab 8A (63-BJ): sc-81909. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lymphoma tissue showing cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Hurwitz, S.N., et al. 2018. An optimized method for enrichment of whole brain-derived extracellular vesicles reveals insight into neurodegenerative processes in a mouse model of Alzheimer's disease. *J. Neurosci. Methods* 307: 210-220.
- Nam, D., et al. 2018. Characterization of Parkinson's disease-related pathogenic TMEM230 mutants. *Anim. Cells Syst.* 22: 140-147.
- Quan, R., et al. 2020. Proteome analysis in a mammalian cell line reveals that PLK2 is involved in avian metapneumovirus type C (aMPV/C)-induced apoptosis. *Viruses* 12: 375.
- Giacometti, J., et al. 2020. Olive leaf polyphenols (OLPs) stimulate GLUT4 expression and translocation in the skeletal muscle of diabetic rats. *Int. J. Mol. Sci.* 21: 8981.
- Cheerathodi, M., et al. 2021. Epstein-Barr virus LMP1 modulates the CD63 interactome. *Viruses* 13: 675.
- Ouyang, Q., et al. 2023. Rab8a as a mitochondrial receptor for lipid droplets in skeletal muscle. *Dev. Cell* 58: 289-305.e6.

## RESEARCH USE

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