

Rab11-FIP1 (3A12H9D2): sc-517228

BACKGROUND

Rab11-FIP1 (Rab 11 family-interacting protein 1), also known as Rab-coupling protein (RCP), is a 1283 amino acid Rab 11 effector protein. Rab11-FIP1, by interacting with Rab GTPases, is involved in the endosomal recycling process and may play a role in controlling membrane trafficking along the phagocytic pathway and during phagocytosis. Localized to the recycling endosome, the cytoplasmic membrane and phagosome membranes, Rab11-FIP1 is expressed as five isoforms produced by alternative splicing. As the most highly expressed isoform, isoform two of Rab11-FIP1 is expressed in brain, lung, testis, small intestine, spleen and heart. Isoform two of Rab11-FIP1 also has been found to form a homooligomer and is believed to interact with many Rab GTPases, including Rab 4A, Rab 11A, Rab 11B and Rab 25.

REFERENCES

- Cullis, D.N., et al. 2002. Rab11-FIP2, an adaptor protein connecting cellular components involved in internalization and recycling of epidermal growth factor receptors. *J. Biol. Chem.* 277: 49158-49166.
- Lindsay, A.J. and McCaffrey, M.W. 2004. Characterisation of the Rab binding properties of Rab coupling protein (RCP) by site-directed mutagenesis. *FEBS Lett.* 571: 86-92.

CHROMOSOMAL LOCATION

Genetic locus: RAB11FIP1 (human) mapping to 8p11.23; Rab11fip1 (mouse) mapping to 8 A2.

SOURCE

Rab11-FIP1 (3A12H9D2) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 130-271 of Rab11-FIP1 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rab11-FIP1 (3A12H9D2) is recommended for detection of Rab11-FIP1 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), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rab11-FIP1 siRNA (h): sc-76331, Rab11-FIP1 siRNA (m): sc-76332, Rab11-FIP1 shRNA Plasmid (h): sc-76331-SH, Rab11-FIP1 shRNA Plasmid (m): sc-76332-SH, Rab11-FIP1 shRNA (h) Lentiviral Particles: sc-76331-V and Rab11-FIP1 shRNA (m) Lentiviral Particles: sc-76332-V.

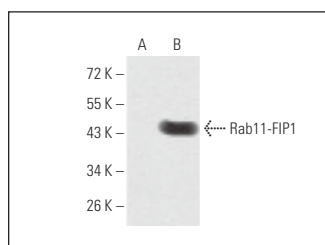
Molecular Weight of Rab11-FIP1 isoforms: 137/77/68/48 kDa.

Positive Controls: human Rab11-FIP1 (130-271)-hlgGfC transfected HEK293 whole cell lysate.

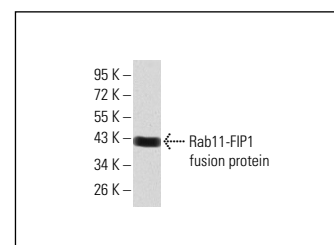
RECOMMENDED SUPPORT REAGENTS

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



Rab11-FIP1 (3A12H9D2): sc-517228. Western blot analysis of Rab11-FIP1 expression in non-transfected (A) and human Rab11-FIP1 (130-271)-hlgGfC transfected (B) HEK293 whole cell lysates.



Rab11-FIP1 (3A12H9D2): sc-517228. Western blot analysis of human recombinant Rab11-FIP1 (130-271) fusion protein.

SELECT PRODUCT CITATIONS

- Fan, X., et al. 2021. Rab11-FIP1 and Rab11-FIP5 regulate plgR/plgA transcytosis through TRIM21-mediated polyubiquitination. *Int. J. Mol. Sci.* 22: 10466.
- Xu, J., et al. 2023. The transcription factor Stat-1 is essential for Schwann cell differentiation, myelination and myelin sheath regeneration. *Mol. Med.* 29: 79.

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.