

# Rab11-FIP1 (N-15): sc-83022

## BACKGROUND

Rab11-FIP1 (Rab 11 family-interacting protein 1), also known as Rab-coupling protein (RCP), is a 1,283 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 2 of Rab11-FIP1 is expressed in brain, lung, testis, small intestine, spleen and heart. Isoform 2 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.
- Peden, A.A., et al. 2004. The RCP-Rab 11 complex regulates endocytic protein sorting. *Mol. Biol. Cell* 15: 3530-3541.
- Damiani, M.T., et al. 2004. Rab coupling protein associates with phagosomes and regulates recycling from the phagosomal compartment. *Traffic* 5: 785-797.
- Marie, N., et al. 2005. Rab coupling protein is selectively degraded by Calpain in a Ca<sup>2+</sup>-dependent manner. *Biochem. J.* 389: 223-231.
- Letessier, A., et al. 2006. Frequency, prognostic impact, and subtype association of 8p12, 8q24, 11q13, 12p13, 17q12, and 20q13 amplifications in breast cancers. *BMC Cancer* 6: 245.
- Jin, M. and Goldenring, J.R. 2006. The Rab11-FIP1/RCP gene codes for multiple protein transcripts related to the plasma membrane recycling system. *Biochim. Biophys. Acta* 1759: 281-295.

## CHROMOSOMAL LOCATION

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

## SOURCE

Rab11-FIP1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Rab11-FIP1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83022 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Rab11-FIP1 (N-15) 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), 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); non cross-reactive with isoforms Rab11-FIP1-3 and Rab11-FIP1-4.

Rab11-FIP1 (N-15) is also recommended for detection of Rab11-FIP1 in additional species, including equine, canine, bovine and porcine.

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) Lenti-viral 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.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

- Fichter, K.M., et al. 2010. Kinetics of G protein-coupled receptor endosomal trafficking pathways revealed by single quantum dots. *Proc. Natl. Acad. Sci. USA* 107: 18658-18663.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Rab11-FIP1 (3A12H9D2): sc-517228**, our highly recommended monoclonal alternative to Rab11-FIP1 (N-15).