

# Rab 23 (T-17): sc-169083

## 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 23, also known as HSPC137, is a 237 amino acid member of the Rab family of proteins and localizes to the cytoplasmic side of the cell membrane. Rab 23 is believed to play a role in intracellular protein transportation and signal transduction mediated by small GTPases. Mutations in the gene encoding Rab 23 may result in Carpenter syndrome, also known as ACP2 (acrocephalopolysyndactyly type 2), a condition characterized by obesity, cardiac defects, polysyndactyly and craniosynostosis.

## REFERENCES

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- Hou, Q., et al. 2008. Integrative genomics identifies RAB23 as an invasion mediator gene in diffuse-type gastric cancer. *Cancer Res.* 68: 4623-4630.
- Yang, L., et al. 2008. Rab23 regulates differentiation of ATDC5 chondroprogenitor cells. *J. Biol. Chem.* 283: 10649-10657.

## CHROMOSOMAL LOCATION

Genetic locus: RAB23 (human) mapping to 6p11.2; Rab23 (mouse) mapping to 1 B.

## SOURCE

Rab 23 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rab 23 of human origin.

## RESEARCH USE

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

## 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-169083 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Rab 23 (T-17) is recommended for detection of Rab 23 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 other Rab family members.

Rab 23 (T-17) is also recommended for detection of Rab 23 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rab 23 siRNA (h): sc-95163, Rab 23 siRNA (m): sc-152630, Rab 23 shRNA Plasmid (h): sc-95163-SH, Rab 23 shRNA Plasmid (m): sc-152630-SH, Rab 23 shRNA (h) Lentiviral Particles: sc-95163-V and Rab 23 shRNA (m) Lentiviral Particles: sc-152630-V.

Molecular Weight of Rab 23: 27 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.

## 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) or our catalog for detailed protocols and support products.