

Rab 23 (C-20): sc-130248

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 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 ACPS2 (acrocephalopolysyndactyly type 2), a condition characterized by obesity, cardiac defects, polysyndactyly and craniosynostosis.

REFERENCES

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- Li, N., et al. 2007. Rab 23 GTPase is expressed asymmetrically in Hensen's node and plays a role in the dorsoventral patterning of the chick neural tube. *Dev. Dyn.* 236: 2993-3006.
- Hou, Q., et al. 2008. Integrative genomics identifies Rab 23 as an invasion mediator gene in diffuse-type gastric cancer. *Cancer Res.* 68: 4623-4630.
- Yang, L., et al. 2008. Rab 23 regulates differentiation of ATDC5 chondroprogenitor cells. *J. Biol. Chem.* 283: 10649-10657.

CHROMOSOMAL LOCATION

Genetic locus: RAB23 (human) mapping to 6p11.2.

SOURCE

Rab 23 (C-20) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of Rab 23 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Rab 23 (C-20) is recommended for detection of Rab 23 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

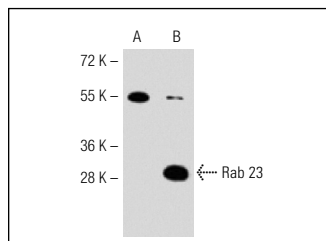
Suitable for use as control antibody for Rab 23 siRNA (h): sc-95163, Rab 23 shRNA Plasmid (h): sc-95163-SH and Rab 23 shRNA (h) Lentiviral Particles: sc-95163-V.

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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Rab 23 (C-20): sc-130248. Western blot analysis of Rab 23 expression in 293 showing nontransfected (A) and transfected (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Huang, T.H., et al. 2009. Rab 23 is expressed in the glomerulus and plays a role in the development of focal segmental glomerulosclerosis. *Nephrol. Dial. Transplant.* 24: 743-754.

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 or our catalog for detailed protocols and support products.