## BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab superfamilies, 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. Rab 22A, also known as MGC16770, is a 194 amino acid protein that acts as a lipid anchor at endosomal and cellular membranes. Rab 22A binds early-endosomal antigen 1 (EEA1), and likely assists in trafficking between endosomes and the Golgi apparatus. The gene encoding Rab 22A maps to human chromosome 20q13.32.

## CHROMOSOMAL LOCATION

Genetic locus: RAB22A (human) mapping to 20q13.32; Rab22a (mouse) mapping to 2 H 4 .

## SOURCE

Rab 22A (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rab 22A of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-98097 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Rab 22A (C-17) is recommended for detection of Rab 22A of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per 100-500 $\mu \mathrm{g}$ of total protein ( 1 ml of cell lysate)], 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 22A (C-17) is also recommended for detection of Rab 22A in additional species, including equine and canine.
Suitable for use as control antibody for Rab 22A siRNA (h): sc-76324, Rab 22A siRNA (m): sc-152629, Rab 22A shRNA Plasmid (h): sc-76324-SH, Rab 22A shRNA Plasmid (m): sc-152629-SH, Rab 22A shRNA (h) Lentiviral Particles: sc-76324-V and Rab 22A shRNA (m) Lentiviral Particles: sc-152629-V.

Molecular Weight of Rab 22A: 21 kDa .
Positive Controls: WI 38 whole cell lysate: sc-364260, Rab 22A (h): 293T Lysate: sc-111846 or I-11.15 whole cell lysate: sc-364370.

## 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 MarkerTM compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker ${ }^{\text {TM }}$ 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). 3) 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.

## DATA



Rab 22A (C-17): sc-98097. Western blot analysis of Rab 22A expression in WI-38 (A) and I-11.15 (B) whole cell lysates.


Rab 22A (C-17): sc-98097. Western blot analysis of Rab 22A expression in non-transfected: sc-117752 (A) and human Rab 22A transfected: sc-111846 (B) 293T whole cell lysates.

## 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.


