

# Rab 5A (P-12): sc-26566

## BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins, which includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies, 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. The possibility that Rab proteins might also direct the exocytosis from secretory vesicles to the plasma membrane is supported by the observation that in yeast, the SEC4 protein, which is 40% homologous to Rab proteins, is associated with secretory vesicles. At least eight members of the Rab subfamily have been identified, each of which is found at a particular stage of a membrane transport pathway.

## CHROMOSOMAL LOCATION

Genetic locus: RAB5A (human) mapping to 3p24.3; Rab5a (mouse) mapping to 17 C.

## SOURCE

Rab 5A (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Rab 5A 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-26566 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Rab 5A (P-12) is recommended for detection of Rab 5A 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rab 5A (P-12) is also recommended for detection of Rab 5A in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Rab 5A siRNA (h): sc-36344, Rab 5A siRNA (m): sc-36345, Rab 5A siRNA (r): sc-156057, Rab 5A shRNA Plasmid (h): sc-36344-SH, Rab 5A shRNA Plasmid (m): sc-36345-SH, Rab 5A shRNA Plasmid (r): sc-156057-SH, Rab 5A shRNA (h) Lentiviral Particles: sc-36344-V, Rab 5A shRNA (m) Lentiviral Particles: sc-36345-V and Rab 5A shRNA (r) Lentiviral Particles: sc-156057-V.

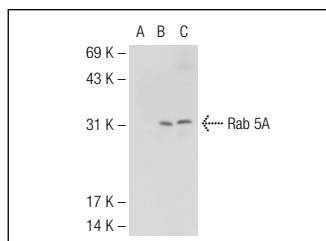
Molecular Weight of Rab 5A: 25 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HL-60 whole cell lysate: sc-2209 or Rab 5A (h3): 293T Lysate: sc-173656.

## 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) 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 5A (P-12): sc-26566. Western blot analysis of Rab 5A expression in non-transfected 293T: sc-117752 (A), human Rab 5A transfected 293T: sc-173656 (B) and HL-60 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Wiedlocha, A., et al. 2005. Phosphorylation-regulated nucleocytoplasmic trafficking of internalized fibroblast growth factor-1. *Mol. Biol. Cell* 16: 794-810.

## 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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Satisfaction  
Guaranteed

Try **Rab 5A (C-3): sc-515401** or **Rab 5A (E-11): sc-166600**, our highly recommended monoclonal alternatives to Rab 5A (P-12).