

# Rab GDI $\alpha$ (N-20): sc-20447

## BACKGROUND

Rab proteins, a family of Ras-related small GTP-binding proteins, play a key role in regulating intracellular vesicle trafficking. Rab GDP dissociation inhibitor (Rab GDI or GDI3) forms a soluble complex with Rab proteins and thereby prevents the exchange of GDP for GTP. In mammals, there exist two major isoforms, Rab GDI  $\alpha$  (also known as XAP-4) and Rab GDI  $\beta$ . While the mammalian Rab GDI  $\beta$ -genes are ubiquitously expressed, the Rab GDI  $\alpha$  genes are predominantly brain-specific. Since it is expressed predominantly in neural and sensory tissues, Rab GDI  $\alpha$  may serve a specific function in neural signal transmission. The gene sequences for the Rab GDI proteins are extremely conserved in evolution, with substantial homology preserved across three eukaryotic kingdoms.

## CHROMOSOMAL LOCATION

Genetic locus: GDI1 (human) mapping to Xq28; Gdi1 (mouse) mapping to X A7.3.

## SOURCE

Rab GDI  $\alpha$  (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Rab GDI  $\alpha$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20447 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Rab GDI  $\alpha$  (N-20) is recommended for detection of Rab GDI  $\alpha$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

Rab GDI  $\alpha$  (N-20) is also recommended for detection of Rab GDI  $\alpha$  in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rab GDI  $\alpha$  siRNA (h): sc-41838, Rab GDI  $\alpha$  siRNA (m): sc-41839, Rab GDI  $\alpha$  shRNA Plasmid (h): sc-41838-SH, Rab GDI  $\alpha$  shRNA Plasmid (m): sc-41839-SH, Rab GDI  $\alpha$  shRNA (h) Lentiviral Particles: sc-41838-V and Rab GDI  $\alpha$  shRNA (m) Lentiviral Particles: sc-41839-V.

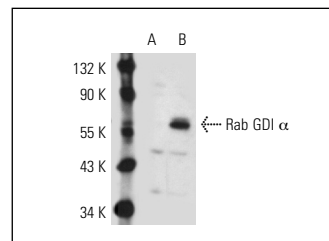
Molecular Weight of Rab GDI  $\alpha$ : 55 kDa.

Positive Controls: Rab GDI  $\alpha$  (h): 293 Lysate: sc-110992 or HeLa whole cell lysate: sc-2200.

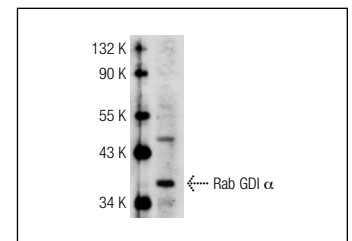
## RECOMMENDED SECONDARY REAGENTS

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 GDI  $\alpha$  (N-20): sc-20447. Western blot analysis of Rab GDI  $\alpha$  expression in non-transfected: sc-110760 (A) and human Rab GDI  $\alpha$  transfected: sc-110992 (B) 293 whole cell lysates.



Rab GDI  $\alpha$  (N-20): sc-20447. Western blot analysis of Rab GDI  $\alpha$  expression in HeLa whole cell lysate.

## 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.



Try **Rab GDI  $\alpha/\beta$  (E-5): sc-374649** or **Rab GDI  $\alpha$  (C-7): sc-271846**, our highly recommended monoclonal alternatives to Rab GDI  $\alpha$  (N-20).