

Rab GDI α (V-20)-R: sc-20449-R

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 α (also known as XAP-4) and Rab GDI β . While the mammalian Rab GDI β genes are ubiquitously expressed, the Rab GDI α genes are predominantly brain-specific. Since it is expressed predominantly in neural and sensory tissues, Rab GDI α 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/GDI2 (human) mapping to Xq28; Gdi1 (mouse) mapping to X A7.3.

SOURCE

Rab GDI α (V-20)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Rab GDI α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-20449 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Rab GDI α (V-20)-R is recommended for detection of Rab GDI α of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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 α (V-20)-R is also recommended for detection of Rab GDI α in additional species, including equine, canine, bovine, porcine and avian.

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

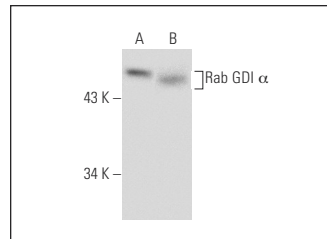
Molecular Weight of Rab GDI α : 55 kDa.

Positive Controls: Rab GDI α (h): 293 Lysate: sc-110992, IMR-32 cell lysate: sc-2409 or mouse brain extract: sc-2253.

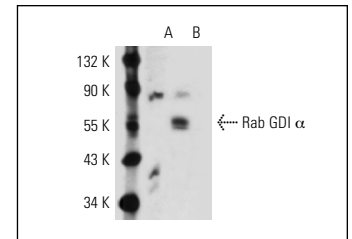
RECOMMENDED SECONDARY REAGENTS

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rab GDI α (V-20): sc-20449. Western blot analysis of Rab GDI α expression in IMR-32 whole cell lysate (A) and mouse brain tissue extract (B).



Rab GDI α (V-20): sc-20449. Western blot analysis of Rab GDI α expression in non-transfected: sc-110760 (A) and human Rab GDI α transfected: sc-110992 (B) 293 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.



Try **Rab GDI α/β (E-5): sc-374649** or **Rab GDI α (C-7): sc-271846**, our highly recommended monoclonal alternatives to Rab GDI α (V-20).