**Rab GDI α/β (E-5): sc-374649**

**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 GD12) 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 (human) mapping to Xq28, GD12 (human) mapping to 10p15.1; GDI1 (mouse) mapping to X A7.3, GDI2 (mouse) mapping to 13 A1.

**SOURCE**
Rab GDI α/β (E-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Rab GDI α of human origin.

**PRODUCT**
Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Rab GDI α/β (E-5) is available conjugated to agarose (sc-374649 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374649 HRP), 200 µg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-374649 PE), fluorescein (sc-374649 FITC), Alexa Fluor® 488 (sc-374649 AF488), Alexa Fluor® 546 (sc-374649 AF546), Alexa Fluor® 594 (sc-374649 AF594) or Alexa Fluor® 647 (sc-374649 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-374649 AF680) or Alexa Fluor® 790 (sc-374649 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**RECOMMENDED SUPPORT REAGENTS**
To ensure optimal results, the following support reagents are recommended:

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

**APPLICATIONS**
Rab GDI α/β (E-5) is recommended for detection of Rab GDI α and Rab GDI β of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Rab GDI α: 55 kDa.
Molecular Weight of Rab GDI β: 50 kDa.
Positive Controls: NIH/3T3 whole cell lysate: sc-2210, Neuro-2A whole cell lysate: sc-364185 or HeLa whole cell lysate: sc-2200.

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

**SELECT PRODUCT CITATIONS**

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