



Qty: 100 µg/400 µl

Rabbit anti-GDI

Catalog No. 71-0300

Lot No. See product label

Rabbit anti-GDI

FORM

This polyclonal antibody is supplied as a 400 µl aliquot at 0.25 mg/ml in phosphate buffered saline (PBS), pH 7.4, containing 0.1% sodium azide (NaN₃). The antibody is epitope affinity-purified from rabbit antiserum.

IMMUNOGEN

A 20 amino acid synthetic peptide derived from bovine brain Rab Guanine Nucleotide Dissociation Inhibitor (GDI).

SPECIFICITY

This antibody is specific for GDI-1 (~50 kD). GDI-1 is also referred to as GDI-α and Rab3A GDI⁽¹⁾. Cross reactivity to GDI-2 (~46 kD) has been observed. A synthetic peptide, corresponding to a 20 amino acid sequence of bovine brain Rab Guanine Nucleotide Dissociation Inhibitor (GDI), was conjugated to carrier protein and used as the immunogen. This sequence is conserved in both mouse and rat GDI proteins.

REACTIVITY

Human, mouse and rat. Reactivity has been confirmed by Western blot analysis of extracts derived from human HEK293 cells and of recombinant bovine Rab-GDI.

USAGE

The dilutions below are only starting recommendations. Optimal concentrations of this antibody should be determined by the researcher for each specific application.

ELISA: 0.5-1 µg/ml
Immunoprecipitation: 5-10 µg
Western Blotting⁽²⁾: 1 µg/ml

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND^(2,3)

Small molecular weight GTP-binding proteins of the Rab family have been shown to play an essential role in the regulation of vesicular trafficking. The cycling of these proteins between the inactive (GDP-bound) and active (GTP-bound) forms is thought to catalyze docking to specific target membranes. To date, several accessory proteins which serve to regulate the association of Rab proteins with GTP or GDP have been identified^(4,5,6). The best characterized of these Rab accessory proteins is Rab3A GDI^(4,5,7,8). Rab3A GDI forms cytosolic complexes with Rab3A and, *in vitro*, promotes the dissociation of Rab3A from membranes^(7,8). Two other isoforms of GDI have recently been isolated and have been termed GDI β and GDI-2, respectively^(3,5). Studies have revealed that the proportion of Rab proteins found associated with a particular GDI isoform depends upon the abundance of the specific GDI in the cytosol, as well as on the tissue and cell type examined^(5,6,7).

REFERENCES

1. Wilson, A.L., et al; *Mol. Biol. Cell*; (Submitted) (1995).
2. Pfeffer, S.R., et al; *Trends Cell Biol.* 2: 41 (1992) (Review Article).
3. Takai, Y., et al; *Int Rev. Cytol.* 133: 187 (1992) (Review Article).
4. Regazzi, R., et al; *J. Biol. Chem.* 267:17512-17519 (1992).
5. Sasaki, T., et al; *J. Biol. Chem.* 266:2333-2337 (1990).
6. Yang, C., et al; *J. Biol. Chem.* 269: 31891-31899 (1994).
7. Nishimura, N., et al; *J. Biol. Chem.* 269:14191-14198 (1994).
8. Ullrich, O., et al; *J. Biol. Chem.* 268:18143-18150 (1993).
9. Shisheva, A., et al; *Mol. Cell. Biol.* 14: 3459-3468 (1994).

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI710300

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

RELATED PRODUCTS

<i>Immunoassay reagents</i>	<i>Conjugate</i>	<i>Cat. No.</i>
Rabbit anti-D4-GDI	Purified	71-6300
Goat anti-Rabbit IgG (H+L) (ZyMAX™ Grade)	Purified	81-6100
	FITC	81-6111
	TRITC	81-6114
	Cy™3	81-6115
	Cy™5	81-6116
	HRP	81-6120
	AP	81-6122
	Biotin	81-6140
rec-Protein G	Sepharose® 4B	10-1241
Protein A	Sepharose® 4B	10-1041

Zymed® and ZyMAX™ are trademarks of Zymed Laboratories Inc. Cy™ is a trademark of Amersham Life Sciences, Inc. Sepharose® is a registered trademark of Pharmacia LKB.

For Research Use Only

SS000726

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI710300

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.