

## TIP47 Antibody

*TIP47 (CT): Tail-interacting protein 47, mannose-6-phosphate receptor binding protein 1, placental protein 17*

**CATALOG NO.: 3881**

### BACKGROUND:

Tail-interacting protein (TIP47) is a cytosolic protein essential for the transport of mannose-6-phosphate receptors (MPRs) from endosomes to the trans-Golgi compartments in cells (1). TIP47 is recruited from the cytoplasm to the late endosomal surface by the Ras-associated protein Rab9 GTPase, enabling it to bind more efficiently to MPR cytoplasmic domains (2). Recently, it was shown that TIP47 regulates the expression of Rab9, as expression of siRNA to TIP47 in transfected cells dramatically decreased the half-life of the Rab9 protein (3) in addition to stabilizing the subcellular localization of Rab9 (4). At least two isoforms of TIP47 are known to exist.

### SOURCE:

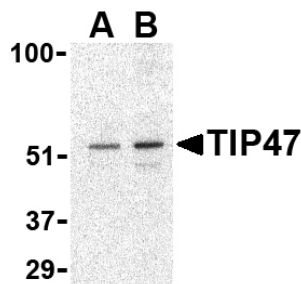
Rabbit polyclonal TIP47 antibody was raised against a 14 amino acid peptide from near the carboxy terminus of human TIP47 (Genbank accession No. O60664).

### APPLICATION:

TIP47 antibody can be used for the detection of TIP47 by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user.) Daudi cell lysate can be used as positive control. TIP47 antibody is human and rat reactive. **This product is for research use only.**

### STORAGE:

TIP47 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of TIP47 in Daudi cell lysate with TIP47 antibody at (A) 0.5 and (B) 1 µg/ml.

### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **3881P**.

Daudi Cell Lysate, Catalog No. **1224**.

TIP47 Antibody (NT), Catalog No. **3883**.

### REFERENCES:

1. Barbero P, Bittova L, and Pfeffer SR. Visualization of Rab9-mediated vesicle transport from endosomes to the trans Golgi in living cells. *J. Cell Biol.* 2002; 156:511-8.
2. Carroll KS, Hanna J, Simon I, et al. Role of the Rab9 GTPase in facilitating receptor recruitment by TIP47. *Science* 2001; 292:1373-7.
3. Aivazian D, Serrano RL, and Pfeffer S. TIP47 is a key effector for Rab9 localization. *J. Cell Biol.* 2006; 173:917-26.
4. Ganley IG, Carroll K, Bittova L, et al. Rab9 GTPase regulates late endosome size and requires effector interaction for its stability. *Mol. Biol. Cell* 2004; 15:5420-30. (06-01D)