

## TOM70 Antibody

*TOM70 (IN): Translocase of the mitochondrial outer membrane 70, TOMM70A*

**CATALOG No.: 4959**

### BACKGROUND:

The translocase of outer mitochondrial membrane (TOM) complex is a multisubunit complex involved in the recognition, unfolding, and translocation of preproteins into the mitochondria (reviewed in 1). TOM70, an important member of the TOM complex, contains a tetratricopeptide repeat domain similar to those found in cytosolic chaperones such as Hsp90 and Hsc70 and provides a docking site for these proteins. This interaction is thought to be a critical first step in the TOM70-dependent mitochondrial import, followed by contact between the preprotein and TOM70 (2). After targeting to TOM70, preproteins are translocated through the outer membrane via the TOM40 import pore complex. The precise mechanism of how preproteins progress from TOM70 to TOM40 to full translocation is still unclear. At least two isoforms of TOM70 are known to exist.

### SOURCE:

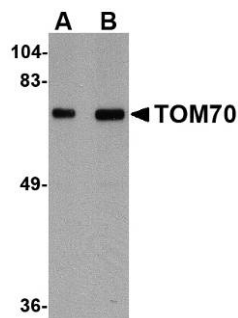
Rabbit polyclonal TOM70 antibody was raised against a 15 amino acid peptide near the center of human TOM70 (GenBank accession no. NP\_055635).

### APPLICATION:

TOM70 antibody can be used for detection of TOM70 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Rat brain tissue lysate can be used as positive control. TOM70 antibody is human, mouse and rat reactive. **For research use only.**

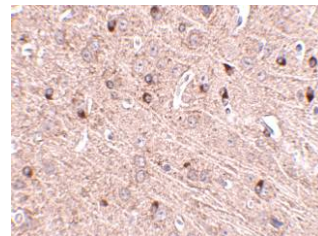
### STORAGE:

TOM70 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 TOM70 in rat brain tissue lysate with TOM70 antibody at (A) 1 and (B) 2 µg/ml.

Immunohistochemistry of TOM70 in mouse brain tissue with TOM70 antibody at 2.5 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4959P**.  
Rat Brain Tissue Lysate, Catalog No. **1463**.

### REFERENCES:

1. Kutik S, Guiard B, Meyer HE, et al. Cooperation of translocase complexes in mitochondrial protein import. *J. Cell Biol.* 2007; 179:585-91.
2. Young JC, Hoogenraad NJ, and Hartl FU. Molecular chaperones Hsp90 and Hsc70 deliver preproteins to the mitochondrial import receptor Tom70. *Cell* 2003; 112:41-50. (09-01D)