

## MAK10 Antibody

*MAK10 (NT): Amino-acid N-acetyltransferase subunit, Embryonic growth-associated protein homolog, EGAP*

**CATALOG No.: 5271**

### BACKGROUND:

The MAK10 gene encodes a 733-amino acid protein with several regions of similarity to T cell receptor alpha-subunit V (variable) regions in yeast (1). The mammalian homologue of yeast MAK10, also known as EGAP, is one subunit of a novel N-terminal acetyltransferase (NAT) that is highly conserved among vertebrate species. It is expressed in a variety of tissues in the developing rat embryo but restricted in expression in the adult, remaining detectable only in tissues undergoing continual cell renewal or in cells responding to pathological injury (2). The MAK10-NAT complex is an essential regulatory enzyme controlling the function of a subset of proteins required for embryonic growth control and vessel development. This complex functionally co-assembles in mammalian cells to regulate cell proliferation and is essential for embryonic development, at least in part through the regulation of target of rapamycin (TOR) signaling events (3,4). At least two isoforms of MAK10 are known to exist.

### SOURCE:

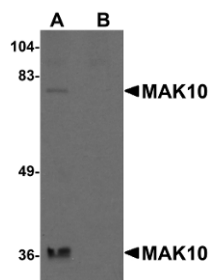
Rabbit polyclonal MAK10 antibody was raised against a 19 amino acid peptide near the amino terminus of human MAK10 (GenBank accession no. NP\_078911).

### APPLICATION:

MAK10 antibody can be used for detection of MAK10 by Western blot at 1 - 2 µg/ml. (Optimal dilution should be determined by user.) Rat heart tissue lysate can be used as positive control. MAK10 antibody is human, mouse and rat reactive. **For research use only.**

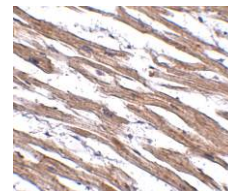
### STORAGE:

MAK10 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 MAK10 in rat heart tissue lysate with MAK10 antibody at 1 µg/ml in the (A) absence and (B) presence of blocking peptide.

Immunohistochemistry of MAK10 in human heart tissue with MAK10 antibody at 2.5 µg/ml.



### RELATED PRODUCTS:

- Blocking Peptide, Catalog No. **5271P**.
- Rat Heart Tissue Lysate, Catalog No. **1461**.
- MAK10 Antibody (IN), Catalog No. **5273**.
- TOR Signaling Pathway Detection Set, Catalog No. **PSI-1805**.

### REFERENCES:

- Lee YJ et al. MAK10, a glucose repressible gene necessary for replication of a dsRNA virus of *Saccharomyces cerevisiae*, has T cell receptor alpha-subunit motifs. *Genetics* 1992; 132:87-96.
- Yi XJ, et al. A novel epithelial wound-related gene is abundantly expressed in developing rat cornea and skin. *Curr. Eye Res.* 2000; 20:430-40.
- Wenzlau JM, et al. Embryonic growth-associated protein is one subunit of a novel N-terminal acetyltransferase complex essential for embryonic vascular development. *Circ. Res.* 2006; 98:846-55.
- Weiser-Evans MC, et al. Novel embryonic genes are preferentially expressed by autonomously replicating rat embryonic and neointimal smooth muscle cells. *Circ. Res.* 2000; 87:608-15. (09-1D)