



Qty: 100 µg/400 µL

Rabbit anti-Tid1

Catalog No. 40-9200

Lot No.

## Rabbit anti-Tid1

### FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is affinity purified from rabbit antiserum.

PAD: ZMD.513

### IMMUNOGEN

Synthetic peptide derived from the C-terminal region of the human sequence for Tid1, which differs from mouse and rat by one conservative and three non-conservative amino acid replacements, from dog by one conservative and two non-conservative amino acid replacements, and from bovine by one conservative and one non-conservative amino acid replacements

### SPECIFICITY

This antibody is specific for human Tid1 (tumorous imaginal discs protein, Tid56 and DnaJ (Hsp40) homolog, subfamily A member 3, DNAJA3) protein. On Western blots, it identifies the target band at ~43 kDa. A band of unknown origin may also be observed at ~80 kDa.

### REACTIVITY

Reactivity has been confirmed with SK-BR3 cell lysate. Based on amino acid sequence homology, reactivity with mouse, rat, dog and cow may be observed.

Sample	Western Blotting
Human	+++
Mouse	ND
Rat	ND
Dog	ND
Bovine	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

### USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**Western Blotting:** 1–3 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.

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**BACKGROUND**

Tid1, also known as human Tid56 and DnaJ (Hsp40) homolog, subfamily A member 3 (DNAJA3), a member of the DnaJ family of cochaperones<sup>1,2</sup>. DnaJ proteins function as regulatory factors for the heat shock protein 70 (Hsp70) family, and are characterized by a highly conserved tetrahelical J domain. Tid1 interacts via the J domain with Hsp70 proteins in the cytoplasm or in the mitochondria, and modulates the binding specificity of Hsp70 molecular chaperones<sup>3,4</sup>. *Tid1* encodes two splice variants (hTid-1L at 43 kDa and hTid-1S at 40 kDa), each of which retains a J domain and co-precipitates with mitochondrial Hsp70<sup>3</sup>.

Tid1 functions as a regulator of intracellular signaling pathways related to cell survival, proliferation and stress responses. Tid1 is critical for early mammalian development by sustaining embryonic cell survival through interaction with Hsp70<sup>5</sup>. Tid1 modulates the activity of a number of intracellular signaling pathways, including the Ras pathway, NFκB, and the IFN-γ signal transduction cascade, by its ability to bind to transcription intermediates and repressors<sup>6-8</sup>.

**REFERENCES**

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