

# **Anti-ASC/TMS1**

**CATALOG No.:** PX122A SIZE: 100 μg

PX122B SIZE: 0.5 mg

### **BACKGROUND:**

Apoptosis is regulated by death domain (DD) and/or caspase recruitment domain (CARD) containing molecules and a caspase family of proteases. CARD containing cell death regulators include RAIDD, RICK, BCL10, Apaf-1, ARC, caspase-9, and caspase-2. A novel CARD domain containing protein was recently identified in human and mouse and designated ASC and TMS1 (1-3). Ectopic expression of ASC/TMS1 induced apoptosis through activation of caspase-9 and inhibited the survival of human breast cancer cells (3,4). Overexpression of ASC/TMS1 induced DNA fragmentation (4). ASC/TMS1 is expressed in a variety of human and mouse tissues (1, 2)

## SOURCE:

Rabbit anti-ASC/TMS1 polyclonal antibody was raised against a synthetic peptide (RESQSYLVEDLERS) corresponding to amino acids 182 to 195 of human ASC (1).

### **APPLICATION:**

This polyclonal antibody can be used for detection of ASC/TMS1 by Western blot at 1  $\mu$ g/ml. HL60 whole cell lysate can be used as positive control and an approximately 25 kDa band can be detected. It is human reactive. For research use only.

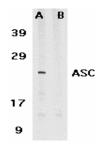
#### STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100  $\mu g$  in 200  $\mu l$  of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

#### **RELATED PRODUCTS:**

Blocking peptide, 50  $\mu g$  at 200  $\mu g/ml$ , is available for competition studies.

HL60 whole cell lysate, 200 µg at 2 mg/ml, is available for positive control.



Western blot analysis of ASC in HL60 whole cell lysate in the absence (A) or presence (B) of blocking peptide (2287P) with anti-ASC at 1  $\mu$ g /ml.

### **REFERENCES:**

- 1. Masumoto J, Taniguchi S, Ayukawa K, Sarvotham H, Kishino T, Niikawa N, Hidaka E, Katsuyama T, Higuchi T, Sagara J. ASC, a novel 22-kDa protein, aggregates during apoptosis of human promyelocytic leukemia HL-60 cells. *J Biol Chem.* 1999;274(48):33835-8.
- 2. Masumoto J, Taniguchi S, Nakayama K, Ayukawa K, Sagara J. Murine Ortholog of ASC, a CARD-Containing Protein, Self-Associates and Exhibits Restricted Distribution in Developing Mouse Embryos. *Exp Cell Res.* 2001;262(2):128-133.
- 3. Conway KE, McConnell BB, Bowring CE, Donald CD, Warren ST, Vertino PM. TMS1, a novel proapoptotic caspase recruitment domain protein, is a target of methylation-induced gene silencing in human breast cancers. *Cancer Res.* 2000;60(22):6236-42.
- McConnell BB, Vertino PM. Activation of a caspase-9-mediated apoptotic pathway by subcellular redistribution of the novel caspase recruitment domain protein TMS1. Cancer Res. 2000;60(22):6243-7.

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**CAUTION:** NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.

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