

## ASC Antibody

### ASC: TMS1

CATALOG NO.: 2287

#### 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:

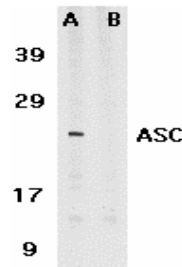
Rabbit polyclonal ASC antibody was raised against a synthetic peptide (RESQSYLVEDLERS) corresponding to amino acids 182 to 195 of human ASC (1).

#### APPLICATION:

ASC antibody can be used for detection of ASC/TMS1 by Western blot at 1 µg/ml. (Optimal dilution should be determined by user.) HL60 whole cell lysate can be used as positive control and an approximately 25 kDa band can be detected. ASC antibody is human reactive. **For research use only.**

#### STORAGE:

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



Western blot analysis of ASC in HL60 whole cell lysate in the absence (A) or presence (B) of blocking peptide (2287P) with ASC antibody at 1 µg/ml.

#### RELATED PRODUCTS:

Blocking peptide, 50 µg at 200 µg/ml, is available for competition studies (Catalog No. **2287P**).

HL60 Whole Cell Lysate, 100 µg at 2 mg/ml, is available for positive control (Catalog No. **1209**).

#### 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.
4. 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.

(WD0102)