12170 Flint Place
Poway, CA 92064
www.prosci-inc.com

Toll Free: 888-513-9525
Tel: 858-513-2638
Fax: 858-513-2692
techsupport@prosci-inc.com

AES Antibody

AES (CT): Amino-terminal enhancer of split, GRG, ESP1, TLE5

CATALOG NO.: 3607

BACKGROUND:

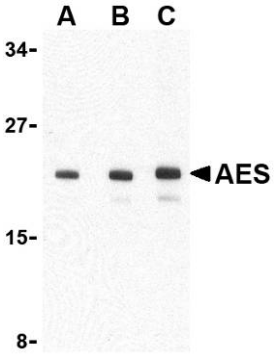
Adhesion to extracellular matrix regulates cell survival through both integrin engagement and appropriate cell spreading. Anoikis is the molecular mechanism of apoptosis induced by integrin detachment (1). Amino-terminal enhancer of split (AES) is a member of the Groucho/ transducin-like enhancer of split (TLE) family of transcriptional regulators, a group of transcriptional co-repressors that play important roles in neurogenesis, segmentation, and sex determination (2,3). AES forms a complex with Bit1 (Bcl-2 inhibitor of transcription 1), a mitochondrial protein that is released into the cytoplasm upon onset of apoptosis (4). It has been suggested that this complex turns off a survival-promoting gene transcription program controlled by the TLE protein family. (4). Interestingly, apoptosis of cells transfected with AES and Bit1 could be inhibited if the cells were allowed to attach to fibronectin through the $\alpha 5\beta 1$ integrin suggesting that the Bit1-AES pathway contributing to anoikis is regulated by integrins, and in particular, the $\alpha 5\beta 1$ integrin (4).

SOURCE:

Rabbit polyclonal AES antibody was raised against a 16 amino acid peptide from near the carboxy terminus of human AES (Genbank accession No. NP_945320).

APPLICATION:

AES antibody can be used for the detection of AES by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user). 293 cell lysate can be used as positive control. AES antibody is human, mouse, and rat reactive. **This product is for research use only.**



Western blot analysis of AES in 293 cell lysate with AES antibody at (A) 1, (B) 2 and (C) 4 µg/ml.

STORAGE:

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

RELATED PRODUCTS:

Blocking peptide, Catalog No. **3607P.**
293 Cell Lysate, Catalog No. **1210.**
Bit1 Antibody (NT), Catalog No. **3603.**
AES Antibody (NT), Catalog No. **3609.**
Bcl-2 Antibody (NT), Catalog No. **3335.**

REFERENCES:

1. Martin SS and Vuori K. Regulation of Bcl-2 proteins during anoikis and amorphosis. *Biochim Biophys Acta.* 2004; 1692:145-57.

2. Miyasaka H, Choudhury BK, Hou WE, et al. Molecular cloning and expression of mouse and human cDNA encoding AES and ESG proteins with strong similarity to Drosophila enhancer of split groucho protein. *Eur. J. Biochem.* 1993; 216:343-52.

3. Chen G and Courey AJ. Groucho/TLE family proteins and transcriptional repression. *Gene* 2000; 249:1-16.

4. Jan Y, Matter M, Pai J-t, et al. A mitochondrial protein, Bit1, mediates apoptosis regulated by integrins and groucho/TLE corepressors. *Cell* 2004; 116:751-762.

(WD1005)