

AES Antibody

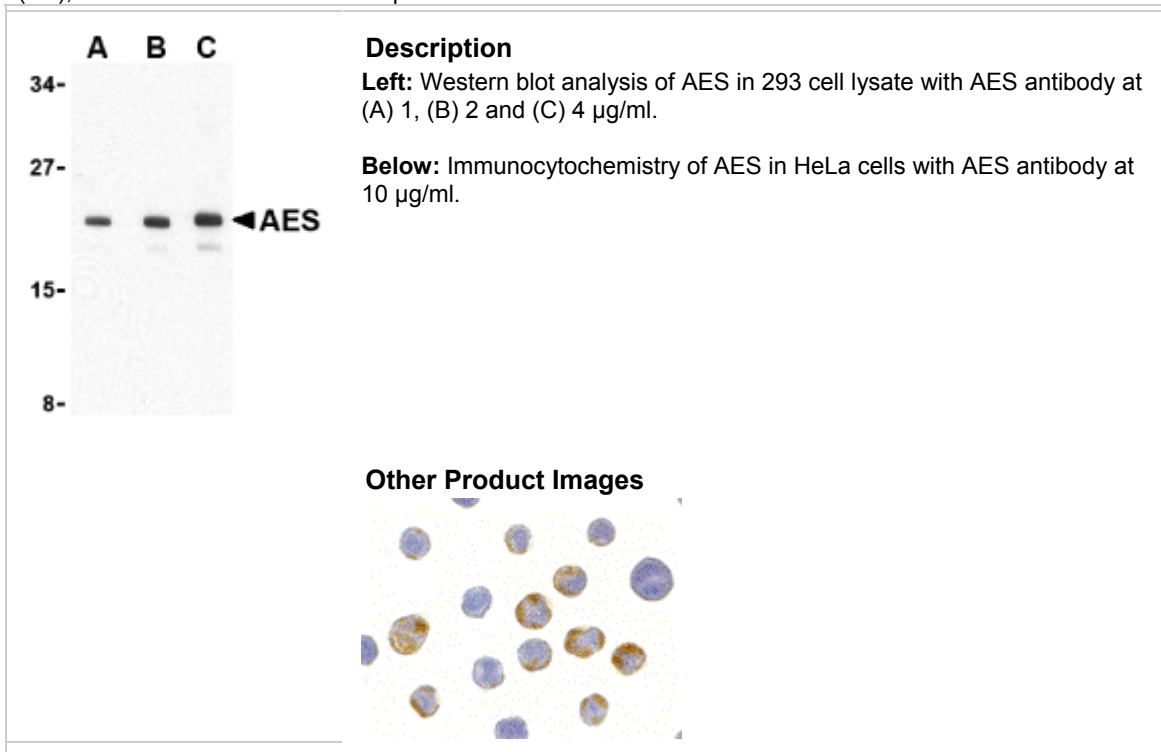
APO-3607

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).

Additional Names

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



Source

AES antibody was raised against a 16 amino acid peptide from near the carboxy terminus of human AES.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

AES antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Immunogen

Human AES / Amino-terminal enhancer of split / GRG / ESP1 / TLE5 (C-Terminus) Peptide

Application

AES antibody can be used for the detection of AES by Western blot at 1 - 2 µg/ml.

Tested Application

E, WB, ICC

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

AES Peptide (contact Zyagen for availability)

Storage

AES antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Positive Control

1. 293 Cell Lysate (contact Zyagen for availability)
2. HeLa Cell Lysate (contact Zyagen for availability)

Species Reactivity

H, M, R

Protein GI Number

39812019

Protein Accession Number

NP_945320

Short Description

(CT) Amino-terminal enhancer of split

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.