Anti-AES (CT)

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

CATALOG No: 54226

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 $\alpha5\beta1$ integrin suggesting that the Bit1-AES pathway contributing to anoikis is regulated by integrins, and in particular, the $\alpha5\beta1$ integrin (4).

SOURCE AND REACTIVITY:

Rabbit anti-AES polyclonal antibody was raised against a 16 amino acid peptide from near the C-terminus of human AES (Genbank accession No. NP_945320). Anti-AES reacts with AES at the molecular weight of approximately 21 kDa on western blot. Species reactivity includes human, mouse and rat, while others are not tested.

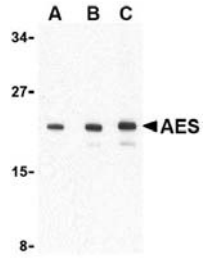
APPLICATION:

The following concentration ranges are recommended starting points for this product.

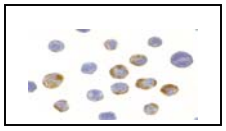
WB: 1 – 2 µg/ml

ICC

Positive Control: 293 cell lysate



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



Immunocytochemistry of AES in HeLa cells with anti-AES at 10 µg/ml.

This product is for in vitro research purposes only.

RELATED PRODUCTS:

Anti-Bit1 (NT), Catalog No. **54224**
Anti-AES (NT), Catalog No. **54227**
Anti-Bcl-2 (NT), Catalog No. **54175**

STORAGE:

The antibody is supplied as immunoaffinity purified IgG, in 1X PBS containing 0.02% Sodium Azide. Store at 2-8 ˚C for up to 1 year. Avoid repeated freeze thaw cycles.

REFERENCES:

1. Martin, SS. et al. *Biochim Biophys Acta.* **1692**, 145 (2004).
2. Miyasaka, H. et al. *Eur. J. Biochem.* **216**, 343 (1993).
3. Chen, G. et al. *Gene* 249, 1 (2000).
4. Jan, Y. et al. *Cell* **116**, 751 (2004).