

## Rabbit Anti-Human/Mouse Amino Terminal Enhancer of Split

### Instruction Manual

Catalog Number	PK-AB718-3609
Synonyms	AES Antibody: Amino-terminal enhancer of split, GRG, ESP1, TLE5
Description	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. 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. 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. It has been suggested that this complex turns off a survival-promoting gene transcription program controlled by the TLE protein family. 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.
Quantity	100 $\mu$ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal AES antibody was raised against a 16 amino acid peptide from near the amino-terminus of human AES (Genbank accession No. NP_945320).
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 $\mu$ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to 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.
Applications	E, WB, ICC, IF <span style="float: right;">INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually.</span> AES antibody can be used for the detection of AES by Western blot at 2 - 4 $\mu$ g/mL. Antibody can also be used for immunocytochemistry starting at 10 $\mu$ g/mL. For immunofluorescence start at 20 $\mu$ g/mL.
Images	Available upon request.
References	Martin SS and Vuori K. Regulation of Bcl-2 proteins during anoikis and amorphosis. <i>Biochim Biophys Acta</i> . 2004; 1692:145-57. 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. <i>Eur. J. Biochem</i> . 1993; 216:343-52. Chen G and Courey AJ. Groucho/TLE family proteins and transcriptional repression. <i>Gene</i> 2000; 249:1-16. Jan Y, Matter M, Pai J-t, et al. A mitochondrial protein, Bit1, mediates apoptosis regulated by integrins and groucho/TLE corepressors. <i>Cell</i> 2004; 116:751-762.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3609P 293 Cell Lysate, Cat. No. PK-AB718-1210 Bit1 Antibody (NT), Cat. No. PK-AB718-3603; AES Antibody (CT), Cat. No. PK-AB718-3607; Bcl-2 Antibody (NT), Cat. No. PK-AB718-3335

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