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HIGH PERFORMANCE ANTIBODIES ... AND MORE

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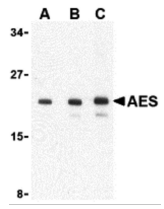
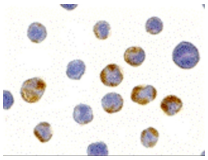
AES Antibody

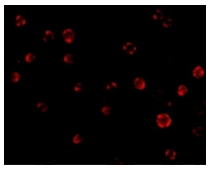
Cat. No.: 3607



AES Antibody



Immunocytochemistry of AES in HeLa cells with AES antibody at 10 µg/mL.



Immunofluorescence of AES in Hela cells with AES antibody at 20 µg/mL.

Specifications

HOST SPECIES:	Rabbit
SPECIES REACTIVITY:	Human, Mouse, Rat
IMMUNOGEN:	AES antibody was raised against a 16 amino acid synthetic peptide from near the carboxy terminus of human AES. The immunogen is located within the last 50 amino acids of AES.
TESTED APPLICATIONS:	ELISA, ICC, IF, WB

APPLICATIONS:	AES antibody can be used for the detection of AES by Western blot at 1 - 4 µg/mL. Antibody can also be used for immunocytochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL. Antibody validated: Western Blot in human samples; Immunocytochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.
POSITIVE CONTROL:	1) Cat. No. 1210 - HEK293 Cell Lysate
	2) Cat. No. 1201 - HeLa Cell Lysate
	3) Cat. No. 17-001 - HeLa Cell Slide

Properties

PURIFICATION:	AES Antibody is affinity chromatography purified via peptide column.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated
PHYSICAL STATE:	Liquid
BUFFER:	AES Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	AES antibody can be stored at 4˚C for three months and -20˚C, stable 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.

Additional Info

OFFICIAL SYMBOL:	AES
ALTERNATE NAMES:	AES Antibody: GRG, ESP1, GRG5, TLE5, AES-1, AES-2, GRG, Amino-terminal enhancer of split, Gp130-associated protein GAM, Amino enhancer of split
ACCESSION NO.:	NP_945320
PROTEIN GI NO.:	39812019
GENE ID:	166
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.

Background and References

BACKGROUND:	AES Antibody: Adhesion to extracellular matrix regulates cell survival through both integrin engagement and appropriate cell spreading. Anoikis is the molecular mechanism of apop-tosis 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 alpha5beta1 integrin suggesting that the Bit1-AES pathway contributing to anoikis is regulated by integrins, and in particular, the alpha5beta1 integrin.
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.