

# Bit1 (IN) antibody (pAb)

## Rabbit Anti-Human/Mouse Bcl-2 Inhibitor of Transcription 1

### Instruction Manual

Catalog Number	PK-AB718-3605
Synonyms	Bit1 Antibody: Bcl-2 inhibitor of transcription 1, Peptidyl-tRNA hydrolase 2
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. Bit1 (Bcl-2 inhibitor of transcription 1) was recently identified as being involved in this process. Bit1 is a mitochondrial protein that is released into the cytoplasm upon onset of apoptosis where it forms a complex with AES, a small Groucho/transducin-like enhancer of split (TLE) protein and induces caspase-independent apoptosis. Both AES and TLE proteins are transcriptional co-repressors that play important roles in neurogenesis, segmentation, and sex determination. It has been suggested that Bit1-AES complexes turn off a survival-promoting gene transcription program controlled by TLE. Interestingly, apoptosis of cells transfected with Bit1 and AES 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 Bit1 antibody was raised against a 16 amino acid peptide from near the center of human Bit1 (Genbank accession No. NP_057161).
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, IHC, IF Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Application have to be determined individually. Bit1 antibody can be used for the detection of Bit1 by Western blot at 1 - 4 $\mu$ g/mL. Antibody can also be used for immunohistochemistry 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. 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. Chen G and Courey AJ. Groucho/TLE family proteins and transcriptional repression. <i>Gene</i> 2000; 249:1-16.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3605P Daudi Cell Lysate, Cat. No. PK-AB718-1224 Bit1 Antibody (NT), Cat. No. PK-AB718-3603 AES Antibody (CT), Cat. No. PK-AB718-3607
FOR IN VITRO RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.	