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Datasheet for 600-401-Z75

BIT1 Antibody

Overview

Description:	Anti-BIT1 (RABBIT) Antibody - 600-401-Z75
Item No.:	600-401-Z75
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

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. 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 alpha5beta1 integrin suggesting that the Bit1-AES pathway contributing to anoikis is regulated by integrins, and in particular, the alpha5beta1 integrin.
Synonyms:	Bit1 Antibody, BIT1, PTH2, CGI-147, BIT1, Peptidyl-tRNA hydrolase 2, mitochondrial, Bcl-2 inhibitor of transcription 1, PTH 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PTRH2
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Bit1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the internal region of human Bit1.
Purity/Specificity:	Anti-Bit1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Bit1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9Y3E5 • GeneID - 51651 • NCBI - NP_057161

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Bit1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 19 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:40,000
IF:	20 µg/mL
IHC:	10 µg/mL
WB:	1 - 4 µg/mL

Formulation

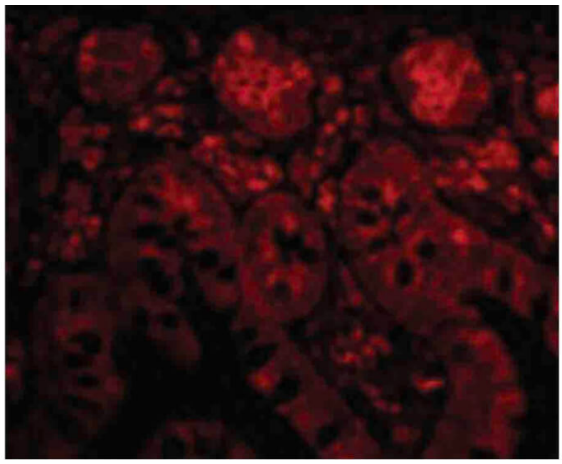
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

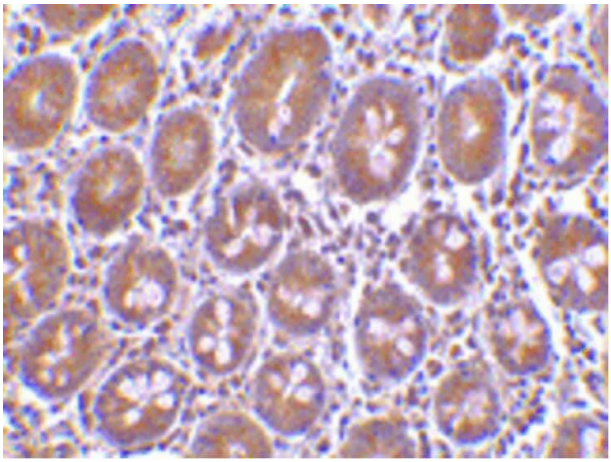
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

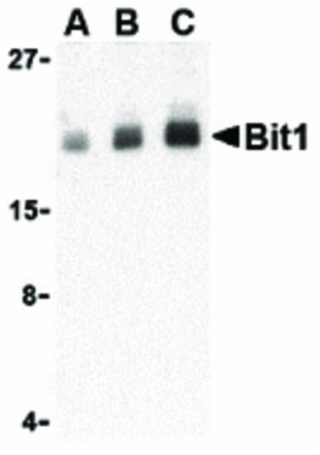
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Bit1 antibody. Cell Type: human small intestine cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Bit1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bit1 is located in the mitochondrion. Staining: Bit1 as red fluorescent signal.



Immunohistochemistry
Immunohistochemistry of Bit1 antibody. Tissue: human small intestine tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Bit1 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bit1 is located in the mitochondrion. Staining: Bit1 is stained with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of Bit1 antibody in Daudi cell lysate. Lane A: Bit1 antibody at 1 µg/mL. Lane B: Bit1 antibody at 2 µg/mL. Lane C: Bit1 antibody at 4 µg/mL. Load: 35 µg per lane. Primary antibody: Bit1 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C.
Predicted/Observed size: 19 kDa, 18 kDa for Bit1. Other band(s): Bit1 splice variants and isoforms.

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