

Mouse (monoclonal) Anti-Bcl-X Unconjugated

PRODUCT ANALYSIS SHEET

Catalog Number: AHO0222

Lot Number: See product label

Expiration Date: See Product Label

Quantity/Volume: 100 μg/0.5 mL

Clone Number: 2H12

Isotype: IgG2a (mouse)

Form of Antibody: Purified immunoglobulin in phosphate buffered saline, pH 7.4, with 0.2% bovine serum

albumin.

Preservation: 0.09% sodium azide (Caution: sodium azide is a poisonous and hazardous substance.

Handle with care and dispose of properly.)

Purification: Purified from ascites by Protein A chromatography.

Immunogen: A synthetic peptide, aa 3-14 (Cys-QSNRELVVDFLS), of human Bcl-X protein. This

amino acid sequence is shared by human and murine Bcl-X protein.

Myeloma/Fusion

Partners:

Produced by the fusion between BALB/c splenocytes and mouse myeloma

NS-1 cells.

Specificity: This antibody recognizes Bcl-X protein and shows no cross-reaction with Bcl-2 or Bax.

Bcl-X is a member of Bcl-2 family that regulates apoptosis. Alternative splicing within the first exon of Bcl-X transcripts yields two mRNA species. One mRNA encodes a 27 kDa protein called Bcl- X_L while the other mRNA encodes a 21 kDa protein called Bcl- X_S . This antibody recognizes both Bcl- X_L and Bcl- X_S . As with Bcl-2, Bcl- X_L is a negative regulator of apoptosis and overexpression of Bcl- X_L has been shown to protect cells from apoptosis induced by a variety of stimuli. In contrast, overexpression of Bcl- X_S inhibits Bcl-2 and promotes cell death. Expression of Bcl- X_S appears highest in lymphoid and nerve tissues. Bcl- X_S plays an important role in the regulation of apoptosis

in normal lymphoid tissues.

Species Reactivity: Human, mouse, rat, and pig. Other species were not tested.

Applications: This antibody is suitable for use in immunoprecipitation, Western blotting,

immunofluorescence, flow cytometry, and immunohistology with cryostat and formalin-fixed paraffin embedded tissue. Immunohistology with formalin-fixed tissue requires boiling the tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed

by cooling at room temperature for 20 minutes.

Suggested Working

Dilutions:

PI AHO0222

For immunoprecipitation, use 2 µg per mg cell lysate protein and precipitate with protein A. For Western blotting, use a 1:200-1:400 dilution. For immunohistochemistry, use a

1:100 dilution and react with sample for 30 minutes at room temperature. The optimal antibody concentration should be determined for each specific application.

For Research Use Only. CAUTION: Not for human or animal therapeutic or diagnostic use.

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Recommended Positive

Control:

Human Jurkat, K562, HL-60, HeLa, Reed Sternberg cells in Hodgkin's lymphoma,

PBMCs, and mouse or rat thymocytes.

Storage:

Store at 2-8°C.

References:

Hsu, Y.T., et al. (1997) Cytosol-to-membrane redistribution of Bax and Bcl-X(L) during

apoptosis. Proc. Nat'l. Acad. Sci. USA 94(8):3668-3672.

Hsu, Y.T., et al. (1997) Nonionic detergents induce dimerization among members of the

Bcl-2 family. J. Biol. Chem. 272(21):13829-13834.

Krajewski, S., et al. (1994) Immunohistochemical analysis of in vivo patterns of Bcl-X

expression. Cancer Res. 54(21):5501-5507.

Vander Heiden, M.G., et al. (1997) Bcl-xL regulates the membrane potential and volume

homeostasis of mitochondria. Cell 91(5):627-637.

Explanation of symbols

Symbol	Description	Symbol	Description
REF	Catalogue Number	LOT	Batch code
RUO	Research Use Only	IVD	In vitro diagnostic medical device
X	Use by	ł	Temperature limitation
***	Manufacturer	EC REP	European Community authorised representative
[-]	Without, does not contain	[+]	With, contains
from Light	Protect from light	Æ	Consult accompanying documents
$\bigcap i$	Directs the user to consult instructions for use (IFU), accompanying the product.		

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