9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

20-1031: Polyclonal antibody to Bcl-xL

Clonality :	Polyclonal
Application :	IP,IHC,WB
Reactivity :	Rat,Mouse,Human
Gene :	BAD
Gene ID :	572
Uniprot ID :	Q92934
Format :	Sera
Alternative Name :	BAD,BBC6,BCL2L8
Isotype :	Rabbit IgG
Immunogen Information :	A synthetic peptide of Bcl-xL protein (amino acids 46-66 ETPSAINGNPSWHLADSPAVN) was used as the immunogen for this antibody

Description

The Bcl-2 family of apoptosis-related genes plays central roles in regulating apoptotic pathways (reviewed in Thomadaki and Scorilas, 2006). Regulation of cell death through apoptosis is critical for the maintenance of homeostasis, defense against infectious agents, and normal development. Bcl-2 family proteins regulate apoptosis primarily through the regulation of mitochondrial outer membrane permeability. In mammals, the family consists of both prosurvival (antiapoptotic) and proapoptotic (prodeath) members. Cellular homeostasis is thought to be dependent on a balance between the actions of prosurvival and proapoptotic proteins. Bcl-2 family proteins can be divided into 3 main subfamilies on the basis of their function and the content of their Bcl-2 homology (BH) domains, for example: 1) Prosurvival: Bcl-2, Bcl-XL, Bcl-W, A1, and Mcl-1 2) Proapoptotic (multidomain): Bax, Bak, and Bok. 3) BH3-only (proapoptotic): Bad, Bcl-XS, Bid, Bik, Bim, Blk, Bmf, Bnip, Noxa, and Puma. Prosurvival members inhibit cells from undergoing apoptosis, whereas proapoptotic and BH3-only subfamily members promote apoptosis. There are 4 BH domains (1-4) conserved among Bcl-2 family proteins. The BH domains are important for function as well as for heterodimerization between family members. Typical prosurvival family members have all four BH domains (1-4), whereas proapoptotic (multidomain) members have BH1, 2 and 3 domains and BH3-only members have only the BH3 domain. Overall, the relative ratio of prosurvival and proapoptotic proteins determines the suseptibility of a cell to various apoptotic stimuli. Many Bcl-2 family proteins are differentially expressed in various malignancies and some are useful prognostic biomarkers. Prosurvival proteins are often elevated in diverse cancers and have the potential to confer resistance to both endogenous cell death stimuli and cancer treatments. Alterations in the ratio or levels of Bcl-2 family proteins have been also associated with nonmalignant diseases including neurodegenerative diseases, autoimmune diseases, AIDs, Down's syndrome, cardiovascular diseases, diabetes, glomerulonephritis, and muscular dystrophy. This antibody recognizes Bcl-XL and Bcl-XS. Human Bcl-XL is a 233 amino acid protein and Bcl-XS is a 170 amino acid protein.

Product Info

Amount :	50 µl
Content :	50 µl sera
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

WB: 1:2500-1:5000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

For Research Use Only. Not for use in diagnostic/therapeutics procedures.

9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

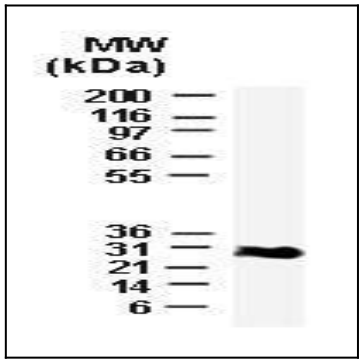


Figure-1: Western blot analysis of Bcl-X in lysates from isolated rat liver mitochondria using 20-1031 at 1:2000. The antibody detected Bcl-XL at ~30 kDa

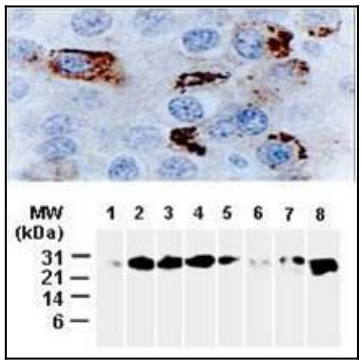


Figure-2: Analysis of Bcl-X in human breast carcinoma using 20-1031 at 1:2000. A. Formalin-fixed, paraffin-embedded tissue section from invasive ductal carcinoma. An organellar/mitochondrial pattern of Bcl-X staining is observed in the cytosol of tumor cells. B. Western blot analysis of tissue lysates from breast surgical tumor tissue biopsies (Lanes 1-7) . Bcl-XS is not detected and variable amounts of Bcl-XL (~30 kDa) is detected. Lane 8. Recombinant Bcl-XL (positive control).

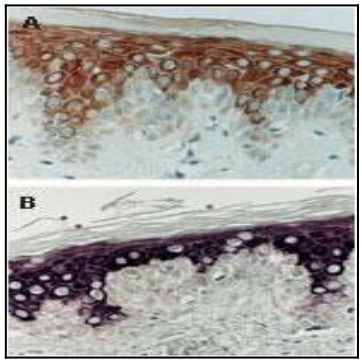


Figure-3: Formalin-fixed paraffin-embedded sections of human epidermis stained for Bcl-X expression using 20-1031. Visualized with DAB (A) or VIP (B) chromagens. Hematoxylin-eosin counterstain.

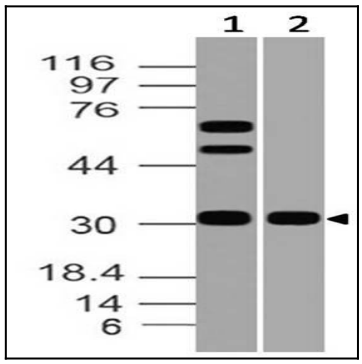


Figure-4: Western blot analysis of Bcl-xL. Anti-Bcl-xL antibody (20-1031) was used with 1:2500 dilution on (1) r Liver and (2) r Brain lysates.

For Research Use Only. Not for use in diagnostic/therapeutics procedures.