

20-1033: Polyclonal antibody to BID

Clonality :	Polyclonal
Application :	IP,IHC,WB
Reactivity :	Dog,Rat,Mouse,Human
Gene :	Bid
Gene ID :	12122
Uniprot ID :	P70444
Format :	Sera
Alternative Name :	p22 BID, p15 BID, p13 BID, p11BID
Isotype :	Rabbit IgG
Immunogen Information :	A full-length recombinant protein of mouse BID was used as 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 susceptibility 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 Bid (approx. 19-23 kDa) or cleaved/truncated forms of Bid. The C-terminal cleaved/truncated form (11-15 kDa) of Bid is often referred to as tBid in the literature (reviewed in Yin, 2006).

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: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

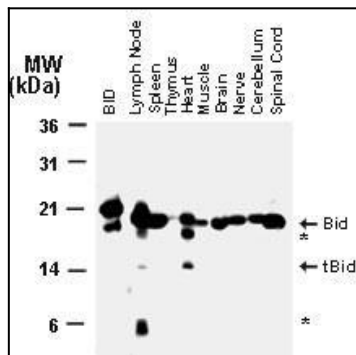


Fig:1 Western blot analysis of m Bid in normal mouse tissues using 20-1033 at 1:2000. BID = recombinant Bid. Arrowheads indicate the positions of the full-length (uncleaved) ~22 kDa Bid and the ~15 kDa truncated form of Bid (tBid) typical of the caspase-cleavage. Additional bands representing partial Bid degradation products are indicated by asterisks (*).

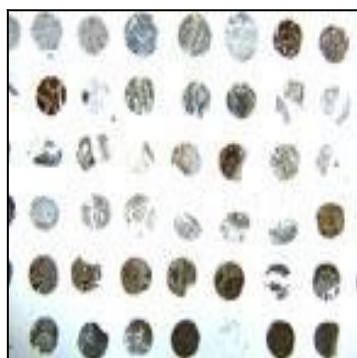


Fig:2 Formalin-fixed, paraffin-embedded human ovarian carcinoma tissue array stained for m Bid expression using 20-1033 at 1:2000. Hematoxylin-eosin counterstain. Variable Bid expression is seen between patient samples.

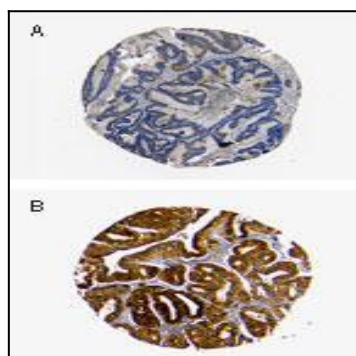


Fig:3 Two cores (A and B) from a human ovarian carcinoma formalin-fixed, paraffin-embedded tissue microarray stained for m Bid expression using 20-1033 at 1:2000. Hematoxylin-eosin counterstain.