

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse BID in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse BID Met1-Asp195 Accession # AAC71064
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse BID (Catalog # 860-MB)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

BID is a 195 amino acid member of the Bcl-2 family of proteins that regulates outer mitochondrial membrane permeability (1). BID is a pro-apoptotic member that causes cytochrome c to be released from the mitochondria intermembrane space into the cytosol. In healthy cells BID is cytosolic. In response to Fas ligand or TNF, BID is cleaved by caspase-8 and it then relocates to the mitochondria outer membrane (2, 3). Cleavage of BID by caspase-8 generates a new N-terminal that contains a terminal glycine. It appears that the glycine is myristoylated and myristoylation serves to target BID to the mitochondria (4). BID may then interact with another pro-apoptotic Bcl-2 family member Bak (5). Interaction of BID with Bak causes altered mitochondrial membrane permeability. A 9-13 amino acid stretch called the BH3 region (Bcl-2 homology region) appears to mediate the BID interaction with other Bcl-2 family members. BID is neutralized by binding to the anti-apoptotic member Bcl-xL.

References:

1. Gross, A. *et al.* (1999) *Genes and Develop.* **13**:1899.
2. Luo, X., *et al.* (1998) *Cell* **94**:481.
3. Li, H. *et al.* (1998) *Cell* **94**:491.
4. Zha, J. *et al.* (2000) *Science* **290**:1761.
5. Wei, M.C. *et al.* (2000) *Genes Dev.* **14**:2060.