

TREVIGEN® Product Data

For Research Use Only. Not For Use In Diagnostic Procedures

Anti-Bax YTH-2D2 Monoclonal Antibody

Catalog #: 2282-MC-100

Size: 100 µg

Description: The Bcl-2 family of proteins plays a crucial role in the regulation of cell death in many eukaryotic systems. Bax has been shown to redistribute from the cytosol to the mitochondria during apoptosis, and overexpression of Bax can accelerate cell death. Coregulation of Bax dimer formation and intracellular localization are associated with Bax conformational changes. Anti-Bax YTH-2D2 is specific for human Bax and does not cross react with mouse or rat Bax. When used in conjunction with the anti-Bax YTH-6A7 (cat# 2281-MC-100), which recognizes only detergent treated Bax, the researcher may selectively identify the activated form of Bax.

Physical State: This antibody is provided as purified immunoglobulin from mouse ascites in 1X PBS containing 0.01% sodium azide.

Immunogen: A synthetic peptide corresponding to amino acids 3 to 16 of the human Bax sequence.

Ig Class: IgG₁

Specificity: Anti-Bax YTH-2D2 cross reacts with human Bax.

Storage: Store at 4°C.

Applications: Western analysis and immunoprecipitation. For western blots, an antibody dilution of 1:1,000 is recommended.

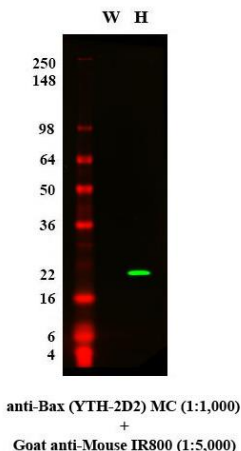


Fig. 1 Western blot analysis of mouse Wehi (W) and human HT1080 (H) cell lines. Cells were lysed in Tris-Glycine SDS sample buffer at a concentration of 1×10^7 cells/ml and 10 µl of lysates were loaded per well of 4-20% Tris-Glycine gel. Proteins were transferred onto an Immobilon FL membrane and Bax was detected with Trevigen's anti-Bax (YTH-2D2) antibody (cat# 2282-MC-100) and visualized using an IR800-conjugated secondary antibody. The membrane was scanned using an Odyssey Infrared Imaging System (Licor). Trevigen's Bax antibody (clone YTH-2D2) (cat# 2282-MC-100) recognizes human, but not mouse Bax protein.

TREVIGEN®

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Cell Lysates for Western Blotting:

To prepare total cell lysates, cells are solubilized in 1X SDS gel sample buffer (63 mM Tris, pH 6.8, 10% glycerol, 2% SDS, 2.5% β -mercaptoethanol, and 0.0025% bromophenol blue) at 1×10^7 cells per ml. The extracts are heated in a boiling water bath for 5 minutes. Electrophorese on 4-20% Tris-Glycine SDS-PAGE gels.

Procedure for Immunoblotting using Peroxidase Detection:

Blotting buffer: 12 mM Tris base, 96 mM Glycine, and 20% MeOH.

Blocking solution: 5% (w/v) nonfat dry milk in TBS, 0.1% Tween[®]-20.

Antibody solution: 5% (w/v) nonfat dry milk, 0.1% Tween[®]-20 in TBS.

Transfer the electrophoresed proteins to a nitrocellulose or PVDF membrane and incubate for 1 hour at room temperature in blocking solution. Then, incubate overnight at 4°C in antibody solution containing a 1:1,000 dilution of anti-Bcl-2 YTH-2D2 antibody. Empirical determination of primary antibody concentration will be required for optimal results.

Wash the membrane at room temperature for 15 minutes with 3 changes of 0.1% Tween[®]-20 in TBS. Incubate the membrane at room temperature for 1 hour in antibody solution containing anti-mouse conjugated to horseradish peroxidase. Empirical determination of the secondary antibody concentration will be required for optimal results.

Wash the membrane for 15 minutes with 3 changes of 0.1% Tween[®]-20 in TBS. Develop peroxidase reaction using e.g. chemiluminescence (Trevigen's PeroxyGlow A, cat# 4855-20-13, and PeroxyGlow B, cat# 4855-20-14).

References:

1. Suzuki, M., R.J. Youle, and N. Tjandra. 2000. Structure of bax. Coregulation of dimer formation and intracellular localization. *Cell* **103**:645-54.
2. Hsu, Y.-T., K.G. Wolter, and R.J. Youle. 1997. Cytosol-to-membrane redistribution of Bax and Bcl-X_i during apoptosis. *Proc. Natl. Acad. Sci. USA* **94**:3668-3672.
3. Hsu, Y.-T., and R.J. Youle. 1997. Nonionic detergents induce dimerization among members of the Bcl-2 family. *J. Biol. Chem.* **272**:13829-13834.
4. Neuchushtan, A., C.L. Smith, Y.-T. Hsu, and R.J. Youle. 1999. Conformation of the Bax C-terminus regulates subcellular location and cell death. *EMBO J.* **18**:2330-2341.

Related Products:

Catalog #	Description	Size
4411-PC-100	Anti-Phosphorylated Histone H2AX polyclonal	100 μ l
6370-MC-100	Anti-human/murine-Cytochrome C	100 μ g
6380-MC-100	Anti-human/murine-Holocytochrome C	100 μ g
2290-MC-100	Anti-Bcl-2 mAb (clone YTH 10C4)	100 μ g
2291-MC-100	Anti-Bcl-2 mAb (clone YTH 8C8)	100 μ g
2282-MC-100	Anti-Bcl-2 mAb (clone YTH 2D2)	100 μ g
2281-MC-100	Anti-human-Bax mAb (clone YTH-6A7)	100 μ g
2300-MC-100	Anti-Bcl-XL (clone YTH-2H12)	100 μ g
6361-PC-100	Anti-human/mouse-PBR polyclonal	100 μ l
4335-MC-100	Anti-PAR polymer mAb (10HA)	100 μ l
4336-BPC-100	Anti- PAR polymer polyclonal	100 μ l
4338-MC-50	Anti-human/murine-PARP mAb (clone C2-10)	50 μ g

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