

Product Information

ANTI-BLK (Bcl-2-interacting Killer-like), Mouse

Developed in Rabbit
Affinity Isolated Antibody

Product Number **B8928**

Product Description

Anti-Blk (Bcl-2-interacting Killer-like) is developed in rabbit using a synthetic peptide conjugated to KLH via a C-terminal cysteine as immunogen. The peptide corresponds to amino acids 25-42 (VASETPSMKEP-VRDVDLMC) of mouse Blk. This antibody is affinity-purified mouse Blk using peptide affinity chromatography.

Anti-Blk detects mouse Blk in extracts from *E. coli* cells expressing recombinant mouse Blk and tissue extracts from mouse seminal vesicles, kidney, and liver by immunoblotting.

Blk (Bcl-2-interacting Killer-like), also known as Bik-like killer is a murine member of the pro-apoptotic Bcl-2 family of death regulatory proteins. Structurally and functionally, this protein is related to human Bik and shares 43% homology.¹ Blk cDNA encodes a 150 amino acid sequence with a calculated mass of approximately 16.5 kDa. Blk is localized to the mitochondrial membrane and contains an independent BH3 domain² that is essential for its death agonist activity and its ability to interact with Bcl-xL and Bcl-2.^{1, 3}

Blk induces apoptosis by triggering the formation of the Apaf-1-caspase-9 complex and activation of caspase-9, downstream of Bcl-2 and Bcl-xL.¹ Blk is detected in the testes, kidney, liver, lung, and heart but not in skeletal muscle, spleen, and brain. The highest expression of Blk is seen in the liver and kidney.¹

Reagent

Anti-Blk is supplied as 100 µg of antibody lyophilized from a 0.2 µm filtered solution in phosphate buffered saline.

Preparation Instructions

To one vial of lyophilized powder, add 0.1 ml of 0.2 µm-filtered solution of phosphate-buffered saline (PBS) containing 0.02% sodium azide to produce a 1.0 µg/ml stock solution of antibody.

Storage/Stability

Prior to reconstitution, store at -20° C. The reconstituted product may be stored at 2-8° C for at least one month. For prolonged storage, freeze in working aliquots at -20° C. Avoid repeated freezing and thawing.

Product Profile

The recommended working concentration is 1.0 µg/ml for immunoblotting using extracts from *E. coli* cells expressing mouse Blk (Bcl2-interacting Killer-like) and extracts from mouse seminal vesicles, kidney, and liver by chemiluminescent detection. Using recombinant mouse Blk extracts, a double band is seen at approximately 16-18 kDa. In mouse tissue extracts of seminal vesicles, kidney, and liver, anti-mouse Blk detects an approximately 27 kDa polypeptide.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working dilutions by titration.

References

1. Hegde, R., et al., Blk, a BH3-containing mouse protein that interacts with Bcl-2 and Bcl-xL, is a potent death agonist. *J. Biol. Chem.*, **273**, 7783-7786 (1998).
2. Zha, J., et al., BH3 domain of BAD is required for heterodimerization with BCL-XL and pro-apoptotic activity. *J. Biol. Chem.*, **272**, 24101-24104 (1997).
3. Sattler, et al., Structure of Bcl-xL-Bak Peptide Complex: Recognition Between Regulators of Apoptosis. *Science*, **275**, 983-986 (1997).

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