

## Product Information

### Anti-XIAP

Antibody produced in rabbit  
Affinity Isolated Antibody

Product Number **X 4503**

### Product Description

Anti-XIAP is produced in rabbit using purified, *E. coli*-derived recombinant human XIAP amino acids 1-497 fused with the amino acid sequence (MATVIDHHH-HHHSSNG) at the N-terminus as immunogen. This antibody is affinity-purified on a column derivatized with the recombinant protein.

Anti-XIAP detects human, mouse, and rat XIAP by immunoblotting. The antibody detects endogenous human and mouse XIAP.

XIAP (X-linked inhibitor of apoptosis protein) is a member of the IAPs (inhibitor of apoptosis proteins) that function in cell death pathways to inhibit programmed cell death.<sup>1</sup> XIAP cDNA encodes a 497 amino acid polypeptide with a predicted molecular mass of approximately 57 kDa. The IAPs share one to three copies of an approximately 70 amino acid sequence motif, BIR (baculovirus IAP repeat).<sup>2</sup> These BIR regions promote protein-protein interactions with caspases as well as with members of the TRAF family of signal molecules.<sup>3</sup> XIAP binds and directly inhibits some members of the caspase family of cell-death proteases, caspase-3, and caspase-7<sup>4,5</sup> and functions downstream of mitochondrial events to inhibit apoptosis. IAPs are widely but differentially expressed in human cancers and leukemias.<sup>6</sup>

### Reagent

Anti-XIAP is supplied as 100 µg of antibody lyophilized from a 0.2 µm filtered solution in phosphate buffered saline containing 5% trehalose.

### Preparation Instructions

To one vial of lyophilized powder, add 0.1 ml of 0.2 µm filtered solution of phosphate-buffered saline 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 up to one month. For prolonged storage, freeze in working aliquots. Avoid repeated freezing and thawing. Do not store in a frost-free freezer.

### Product Profile

For immunoblotting, a working antibody concentration of 0.5 µg/ml is recommended using lysates from human Jurkat, mouse C2C12, or rat PC12 cells by chemiluminescent detection.

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

### References

1. Wagenknecht, B., et al., Expression and biological activity of X-linked inhibitor of apoptosis (XIAP) in human malignant glioma. *Cell Death Differ.*, **6**, 370-376 (1999).
2. Sun, C., et al., NMR structure and mutagenesis of the inhibitor-of-apoptosis protein XIAP. *Nature*, **401**, 818-822 (1999).
3. Roy, N., et al., The c-IAP-1 and c-IAP-2 proteins are direct inhibitors of specific caspases. *EMBO J.*, **16**, 6914-6925 (1997).
4. Deveraux, Q. L., et al., X-linked IAP is a direct inhibitor of cell-death proteases. *Nature*, **388**, 300-304 (1997).
5. Takahashi, R., et al., A single BIR domain of XIAP sufficient for inhibiting caspases. *J. Biol. Chem.*, **273**, 7787-7790 (1998).
6. Tamm, I., et al., Expression and prognostic significance of IAP-family genes in human cancers and myeloid leukemias. *Clin. Cancer Res.*, **6**, 1796-1803 (2000).

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