



Product Data Sheet

Product Name:	Anti - Bak (NT)
Catalog Number:	53251
Lot Number:	See label on vial
Product Description:	The antibody is supplied as an ion exchange chromatography purified IgG, at 50 µg in 250 µl of 1X PBS (pH 7.4) with 0.05% sodium azide.
Immunogen:	Rabbit anti-Bak (NT) polyclonal antibody was raised against a peptide corresponding to 13 amino acids near the N-terminus of human Bak (GenBank accession no. Q16611).
Species Reactivity:	Species reactivity includes human and mouse, while others remain untested.
Application Notes:	<p>The following concentration ranges are recommended starting points for this product.</p> <p>WB: 1.0-2.0 µg/ml</p>
Background:	Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer (1). The Bcl-2 family of proteins is comprised of critical regulators of apoptosis that can be divided into two classes: those that inhibit apoptosis and those that promote cell death (2, 3). Bak, a member of pro-apoptotic Bcl-2 family, is an oligomeric protein that localizes to the mitochondria (4, 5). It is thought to share significant functional homology with Bax, another pro-apoptotic Bcl-2 family member, as disruption of bak or bax has little effect on cell death, but mice lacking both genes display multiple developmental defects and cells lacking bak and bax show decreased apoptotic capability (6, 7).
Storage:	Store at 2-8°C for up to one year. Avoid repeated freezing and thawing.
Related Products:	Anti-Bcl-2 (NT), Catalog #. 54175 Anti-Bcl-2 (IN), Catalog #. 54176 Anti-Bax (NT), Catalog #. 54179

Reference:

1. Heiser, D. et al. *Exp Gerontol* **39**, 1125 (2004).
2. Cory, S. et al. *Oncogene* **22**, 8590 (2003).
3. Mikhailov, V. et al. *J Biol Chem* **278**, 5367 (2003).
4. Zong, WX. et al. *Genes Dev* **15**, 1481 (2001).
5. Lindsten, T. et al. *Mol Cell* **6**, 1389 (2000).
6. Lockshin, RA. et al. *Cell Death Differ* **7**, 2 (2000).
7. Kiefer, M. et al. *Nature* **374**, 736 (1995).

This product is for in vitro research use only.