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## Bak (D4E4) Rabbit mAb (PE Conjugate)

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> FC-FP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q16611	<b>Entrez-Gene Id:</b> 578
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<b>Product Usage Information</b>	<b>Application</b> Flow Cytometry (Fixed/Permeabilized)	<b>Dilution</b> 1:50
<b>Storage</b>	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibodies. Protect from light. Do not freeze.	
<b>Specificity/Sensitivity</b>	Bak (D4E4) Rabbit mAb (PE Conjugate) recognizes endogenous levels of total Bak protein.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly75 of human Bak protein.	
<b>Description</b>	This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct flow cytometry analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated Bak (D4E4) Rabbit mAb #12105.	
<b>Background</b>	Bak is a proapoptotic member of the Bcl-2 family (1). This protein is located on the outer membrane of mitochondria and is an essential component for transduction of apoptotic signals through the mitochondrial pathway (2,3). Upon apoptotic stimulation, an upstream stimulator like truncated BID (tBID) induces conformational changes in Bak to form oligomer channels in the mitochondrial membrane for cytochrome c release. The release of cytochrome c to the cytosol activates the caspase-9 pathway and eventually leads to cell death (4,5).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>Gross, A. et al. (1999) <i>Genes Dev.</i> 13, 1899-1911.</li> <li>Wei, M.C. et al. (2001) <i>Science</i> 292, 727-730.</li> <li>Zong, W.X. et al. (2001) <i>Genes Dev.</i> 15, 1481-1486.</li> <li>Degenhardt, K. et al. (2002) <i>J. Biol. Chem.</i> 277, 14127-14134.</li> <li>Wei, M.C. et al. (2000) <i>Genes Dev.</i> 14, 2060-2071.</li> </ol>	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Applications Key</b>	<b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized)
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat <b>Mk:</b> Monkey
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