

**Goat Anti-BAK1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1140a****Specification**

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**Goat Anti-BAK1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">Q16611</a>
Other Accession	<a href="#">NP_001179</a> , <a href="#">578</a> , <a href="#">12018 (mouse)</a> , <a href="#">116502 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Pig
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	23409

**Goat Anti-BAK1 Antibody - Additional Information****Gene ID** 578**Other Names**

Bcl-2 homologous antagonist/killer, Apoptosis regulator BAK, Bcl-2-like protein 7, Bcl2-L-7, BAK1, BAK, BCL2L7, CDN1

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-BAK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-BAK1 Antibody - Protein Information****Name** BAK1**Synonyms** BAK, BCL2L7, CDN1

**Function**

Plays a role in the mitochondrial apoptotic process. Upon arrival of cell death signals, promotes mitochondrial outer membrane (MOM) permeabilization by oligomerizing to form pores within the MOM. This releases apoptogenic factors into the cytosol, including cytochrome c, promoting the activation of caspase 9 which in turn processes and activates the effector caspases.

**Cellular Location**

Mitochondrion outer membrane; Single-pass membrane protein

**Tissue Location**

Expressed in a wide variety of tissues, with highest levels in the heart and skeletal muscle

**Goat Anti-BAK1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-BAK1 Antibody - Images**

AF1140a staining (0.5 µg/ml) of A431 lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

**Goat Anti-BAK1 Antibody - Background**

The protein encoded by this gene belongs to the BCL2 protein family. BCL2 family members form oligomers or heterodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. This protein localizes to mitochondria, and functions to induce apoptosis. It interacts with and accelerates the opening of the mitochondrial voltage-dependent anion channel, which leads to a loss in membrane potential and the release of cytochrome c. This

protein also interacts with the tumor suppressor P53 after exposure to cell stress.

#### **Goat Anti-BAK1 Antibody - References**

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MicroRNA-125b confers the resistance of breast cancer cells to paclitaxel through suppression of pro-apoptotic Bcl-2 antagonist killer 1 (Bak1) expression. Zhou M, et al. J Biol Chem, 2010 Jul 9. PMID 20460378.

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Endogenous Bak inhibitors Mcl-1 and Bcl-xL: differential impact on TRAIL resistance in Bax-deficient carcinoma. Gillissen B, et al. J Cell Biol, 2010 Mar 22. PMID 20308427.