Technical Data Sheet

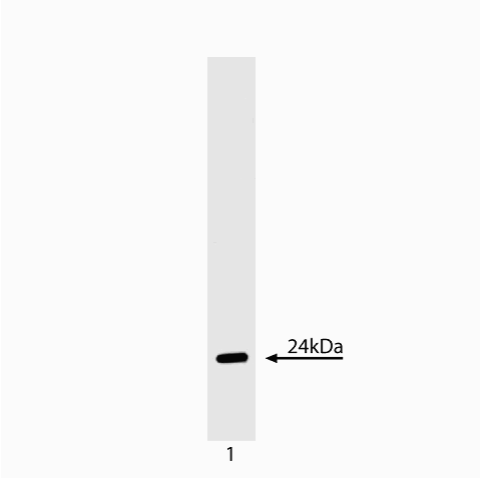
Purified Mouse Anti-Human BAK

Product Information

Material Number:	**556382**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	G317-2
Immunogen:	Human Bak
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	24 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Bak (for Bcl-2 homologous Antagonist/Killer) is a recently identified member of the Bcl-2 family. Bcl-2 family members are involved in mediating programmed cell death or apoptosis, and share two highly conserved functional regions, Bcl-2 homology 1 and 2 (BH1 and BH2). Several of the family members, including Bcl-2, act as inhibitors of apoptosis, whereas others such as Bax promote cell death. Like Bax promote cell death. Like Bax, Bak primarily promotes apoptosis. However, unlike Bax, Bak has also been shown to inhibit cell death. Bak inhibited both serum-starvation and drug induced apoptosis when overexpressed in an Epstein-Barr virus (EBV)-transformed cell line. However, Bax did not inhibit cell death under the same conditions. Bak mNRA has been identified in a wide variety of fetal and adult tissues, with the highest levels observed in heart and skeletal muscle. The apparently ubiquitous expression of Bak has lead to the suggestion that its function may be mediated by cell death inhibitory factors, particularly in cell types with a long life span. Bak migrates at a reduced molecular weight ~24 kDa. G317-2 reacts with human Bak. A synthetic peptide corresponding to the first 50 amino acids of human Bak was used as immunogen.



Western blot analysis of Bak. *Lane 1, lysate from Hela human cervical carcinoma cells was probed with anti-Bak (clone G317-2, Cat. No. 556382) identifies Bak as an ~24 kDa band.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested

Recommended Assay Procedure:

Applications include western blot analysis (1-2 µg/ml). HeLa cells (ATCC CCL-2) are recommended as a positive control. HeLa cell lysate is also available as a ready-to-use positive western blot control (Cat. No. 611449).

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611449	HeLa Cell Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Chittenden T, Harrington EA, O'Connor R, et al. Induction of apoptosis by the Bcl-2 homologue Bak. *Nature.* 1995; 374(6524):733-736.(Biology)

Kiefer MC, Brauer MJ, Powers VC, et al. Modulation of apoptosis by the widely distributed Bcl-2 homologue Bak. *Nature.* 1995; 374(6524):736-739.(Biology)

Reed JC. Bcl-2 and the regulation of programmed cell death. *J Cell Biol.* 1994; 124(1-2):1-6.(Biology)

Yin XM, Oltvai ZN, Korsmeyer SJ. BH1 and BH2 domains of Bcl-2 are required for inhibition of apoptosis and heterodimerization with Bax. *Nature.* 1994; 369(6478):321-323.(Biology)