

Technical Data Sheet

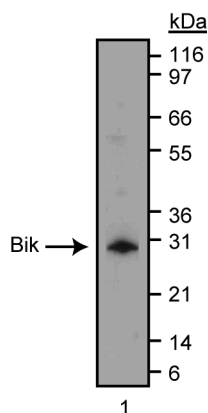
Purified Mouse Anti-Human Bik

Product Information

Material Number:	557040
Alternate Name:	Bcl-2 Interacting Killer; Nbk
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	C33-1
Immunogen:	Human Bik aa. 40-114
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Target MW:	27 kDa
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

Members of the Bcl-2 (B-cell lymphoma-2) family play a major role in regulating the response of cells to apoptotic signals. Several of these proteins function as inhibitors of cell death (e.g., Bcl-2 and Bcl-XL), while others promote cell death (e.g., Bcl-XS, Bax and Bad). Members of this family contain conserved domains, designated BH1, BH2 and BH3, which facilitate protein-protein interactions. Differential interaction among Bcl-2 proteins, as well as their interaction with other cellular or viral proteins, can regulate whether a cell undergoes, or is protected from, an apoptotic death. For example, Bcl-2 normally blocks cell death by forming heterodimers with the pro-apoptotic proteins Bax and Bak. Bcl-2 Interacting Killer (Bik, also known as Nbk) is a novel human protein which is functionally homologous to pro-apoptotic members of the Bcl-2 family. Bik contains the BH3 conserved domain common to Bcl-2 proteins, but lacks either BH1 or BH2 conserved domains. Bik has been reported to interact with and antagonize the activity of anti-apoptotic proteins including Bcl-2, Bcl-X4 as well as the viral proteins Epstein Barr BHRF1 and adenovirus E1B-19K. Blk, a mouse protein which is structurally and functionally homologous to human Bik, has also been identified. In the mouse system, Blk appears to induce apoptosis by activation of caspase-9.



Western blot analysis of Bik in HEK-293 cells. Lane 1, 1 $\mu\text{g/mL}$ of the mouse anti-Bik antibody (clone C33-1) was used on 30 μg of a HEK-293 cell lysate (Human embryonic kidney cells; ATCC CRL-1573).

Preparation and Storage

Store undiluted at 4° C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

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Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharminggen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharminggen/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

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- Han J, Sabbatini P, White E. Induction of apoptosis by human Nbk/Bik, a BH3-containing protein that interacts with E1B 19K. *Mol Cell Biol*. 1996; 16(10):5857-5864.(Biology)
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