

Technical Data Sheet

Purified Mouse Anti-Bad

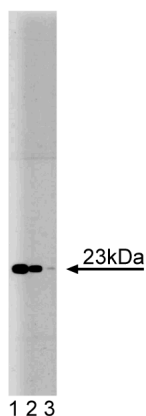
Product Information

Material Number:	610391
Size:	50 µg
Concentration:	250 µg/ml
Clone:	48/Bad
Immunogen:	Mouse Bad aa. 39-198
Isotype:	Mouse IgG2b
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	23 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

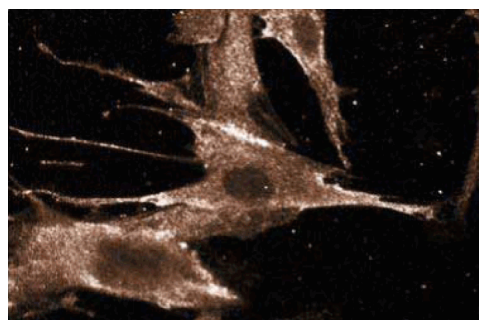
Description

Isolated by screening for Bcl-2 interacting proteins, Bad shows significant homology to Bcl-2 within the Bcl-2 homology domains 1 and 2 (BH1 and BH2). In addition, several other proteins involved in cell death such as Bax, Bcl-X[L], Mcl-1, and A1 share similar homology with Bcl-2. Bcl-2 is known to oppose several apoptotic signals and is considered to be a central downstream cell death repressor. Bcl-X[L] represses apoptosis, but its short form, Bcl-X[S], promotes cell death. Bax is known to homodimerize as well as heterodimerize with Bcl-2. An excess concentration of Bax opposes the ability of Bcl-2 to repress cell death. Bad can selectively dimerize with Bcl-X[L] and Bcl-2, but not with Bax, Bcl-X[S], Mcl-1, A1, or itself. In mammalian cells, Bad binds more strongly to Bcl-X[L] than Bcl-2. This may explain why Bad reverses the death repressor activity of Bcl-X[L], but not that of Bcl-2. The formation of the Bad-Bcl-X[L] heterodimer displaces Bax and restores favorable conditions for apoptosis.

This antibody is tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of Bad on an A431 cell lysate (Human epithelial carcinoma; ATCC CRL-1555). Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-Bad antibody.



Immunofluorescence staining of WI-38 cells (Human lung fibroblasts; ATCC CCL-75).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

Recommended Assay Procedure:

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

Suggested Companion Products

Catalog Number	Name	Size	Clone
611447	A431 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

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.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Ayllon V, Cayla X, Garcia A, et al. Bcl-2 targets protein phosphatase 1 alpha to Bad. *J Immunol.* 2001; 166(12):7345-7352.(Biology: Immunofluorescence, Immunoprecipitation, Western blot)
Graff JR, Konicek BW, McNulty AM. Increased AKT activity contributes to prostate cancer progression by dramatically accelerating prostate tumor growth and diminishing p27Kip1 expression. *J Biol Chem.* 2000; 275(32):24500-24505.(Biology: Western blot)
Tomicic MT, Thust R, Kaina B. Ganciclovir-induced apoptosis in HSV-1 thymidine kinase expressing cells: critical role of DNA breaks, Bcl-2 decline and caspase-9 activation. *Oncogene.* 2002; 21(14):2141-2153.(Biology: Western blot)
Walsh M, Lutz RJ, Cotter TG, O'Connor R. Erythrocyte survival is promoted by plasma and suppressed by a Bak-derived BH3 peptide that interacts with membrane-associated Bcl-X(L). *Blood.* 2002; 99(9):3439-3448.(Biology: Western blot)
Yang E, Zha J, Jockel J, Boise LH, Thompson CB, Korsmeyer SJ. Bad, a heterodimeric partner for Bcl-XL and Bcl-2, displaces Bax and promotes cell death. *Cell.* 1995; 80(2):285-291.(Biology)

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