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#14093

A1/Bfl-1 (D1A1C) Rabbit mAb

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UniProt ID #Q16548

New 05/14

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 18 kDa	Isotype Rabbit IgG**
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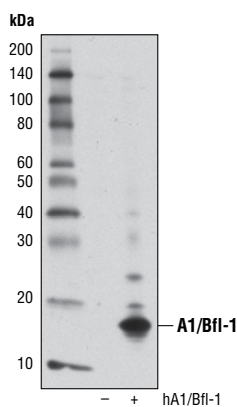
Background: The Bcl-2-related protein A1 (Bfl-1, BCL2A1) is an anti-apoptotic member of the Bcl-2 family originally cloned from mouse bone marrow as a granulocyte macrophage-colony stimulating factor (GM-CSF)-inducible gene (1). Expression of A1/Bfl-1 is primarily restricted to hematopoietic cells, although it has been detected in some non-hematopoietic tissues including lung and in endothelial cells (1,2). A1/Bfl-1 protein is rapidly induced by NF- κ B and is elevated in response to a variety of factors that stimulate this pathway, including TNF- α and IL-1 β , CD40, phorbol ester, and LPS (2-4). As with other Bcl-2 family proteins, A1/Bfl-1 functions by binding and antagonizing pro-apoptotic members of the family (Bid, Bim), which inhibits release of mitochondrial cytochrome c (5). In contrast, research studies indicate that the enzyme calpain cleaves A1/Bfl-1 at specific sites within the amino terminal region, creating pro-apoptotic, carboxy-terminal fragments that promote mitochondrial release of cytochrome c and apoptosis (6). Studies suggest a possible therapeutic strategy of targeting apoptosis through use of the specific A1/Bfl-1 cleavage fragments (7).

Specificity/Sensitivity: A1/Bfl-1 (D1A1C) Rabbit mAb recognizes endogenous levels of total A1/Bfl-1 protein. Proteins of unknown origin are detected at 50 and 130 kDa in some cell lines.

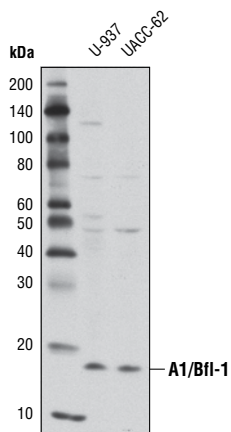
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly29 of human A1/Bfl-1 protein.

Background References:

- (1) Lin, E.Y. et al. (1993) *J Immunol* 151, 1979-88.
- (2) Karsan, A. et al. (1996) *Blood* 87, 3089-96.
- (3) Lee, H.H. et al. (1999) *Proc Natl Acad Sci USA* 96, 9136-41.
- (4) Zong, W.X. et al. (1999) *Genes Dev* 13, 382-7.
- (5) Werner, A.B. et al. (2002) *J Biol Chem* 277, 22781-8.
- (6) Kucharczak, J.F. et al. (2005) *Cell Death Differ* 12, 1225-39.
- (7) Valero, J.G. et al. (2012) *PLoS One* 7, e388620.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with a construct expressing full-length human A1/Bfl-1 protein (hA1/Bfl-1; +), using A1/Bfl-1 (D1A1C) Rabbit mAb.



Western blot analysis of extracts from U-937 and UACC-62 cells using A1/Bfl-1 (D1A1C) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:100

For product specific protocols please see the web page for this product at www.cellsignal.com.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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