SANTA CRUZ BIOTECHNOLOGY, INC.

# A1 (N-20): sc-6066

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The Bcl-2 family of proteins is characterized by its ability to modulate cell death under a broad range of physiological conditions. Bcl-2 and Bcl-$x_L$ function to inhibit apoptosis while other members of the Bcl-2 family, Bax, Bad, Bak and Bcl-$x_S$, oppose death-suppressing effects. An additional member of the family, A1 (also designated Bfl-1), dimerizes with both Bcl-2 and Bax and has been identified as a hematopoietic-specific, early inducible gene. While A1 demonstrates life promoting properties similar to those of Bcl-2, its function may be more temporally regulated during myeloid differentiation and dependent on additional growth stimuli to confer its life promoting properties. A1 is abundantly expressed in bone marrow and at low levels in other tissues. There is evidence that a correlation exists between a high expression of the A1 gene product and stomach cancer.

## REFERENCES


1. Korsmeyer, S.J., et al. 1993. Bcl-2/Bax: a rheostat that regulates an antioxidant pathway and cell death. Sem. Cancer Biol. 4: 327-332.
2. Craig, R.W. 1995. The Bcl-2 gene family. Sem. Cancer Biol. 6: 35-43.
3. Yang, E., et al. 1995. Bad, a heterodimeric partner for Bcl-$x_L$ and Bcl-2, displaces Bax and promotes cell death. Cell 80: 285-291.


## CHROMOSOMAL LOCATION

Genetic locus: BCL2A1 (human) mapping to 15q25.1.

## SOURCE

A1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of A1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6066 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

A1 (N-20) is recommended for detection of A1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for A1 siRNA (h): sc-37285, A1 shRNA Plasmid (h): sc-37285-SH and A1 shRNA (h) Lentiviral Particles: sc-37285-V.

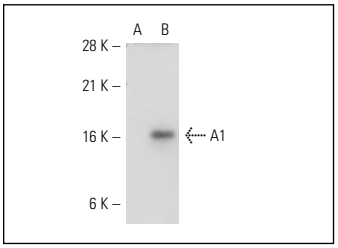
Molecular Weight of A1: 20 kDa.

Positive Controls: A1 (h4): 293T Lysate: sc-112225 or HeLa whole cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA




A1 (N-20): sc-6066. Western blot analysis of A1 expression in non-transfected: sc-117752 (**A**) and human A1 transfected: sc-112225 (**B**) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS


1. Gerber, H., et al. 1998. Vascular endothelial growth factor induces expression of the anti-apoptotic proteins Bcl-2 and A1 in vascular endothelial cells. J. Biol. Chem. 273: 13313-13316.
2. Torikai, H., et al. 2008. Aberrant expression of Bcl2A1-restricted minor histocompatibility antigens in melanoma cells: application for allogeneic transplantation. Int. J. Hematol. 87: 467-473.


## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.