# SANTA CRUZ BIOTECHNOLOGY, INC.

# BAP1 (H-300): sc-28236



## BACKGROUND

Mutations within the BRCA1 gene, localized to chromosome 17q, are believed to account for approximately 45% of families with increased incidence of both early-onset breast cancer and ovarian cancer. The BRCA1 gene is expressed in numerous tissues, including breast and ovary, and encodes a predicted protein of 1,863 amino acids. This protein contains a RING domain near the N-terminus and appears to encode a tumor suppressor. BARD1 (BRCA1-associated RING domain protein 1) and BAP1 (BRCA1-associated protein 1) have both been shown to bind to the N-terminus of BRCA1 and are potential mediators of tumor suppression. BARD1 contains an N-terminal RING domain and three tandem ankyrin repeats. The C-terminus of BARD1 contains a region with sequence homology to BRCA1, termed the BRCT domain. BAP1 is a ubiquitin hydrolase and has been shown to enhance BRCA1-mediated cell growth suppression.

## REFERENCES

- 1. Hall, J.M., et al. 1990. Linkage of early-onset familial breast cancer to chromosome 17q21. Science 250: 1684-1689.
- Narod, S.A., et al. 1991. Familial breast-ovarian cancer locus on chromosome 17q12-q23. Lancet 338: 82-83.

#### CHOMOSOMAL LOCATION

Genetic locus: BAP1 (human) mapping to 3p21.1; Bap1 (mouse) mapping to 14 B.

#### SOURCE

BAP1 (H-300) is a rabbit polyclonal antibody raised against amino acids 430-729 mapping at the C-terminus of BAP1 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

BAP1 (H-300) is recommended for detection of BAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). BAP1 (H-300) is also recommended for detection of BAP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BAP1 siRNA (h): sc-29787, BAP1 siRNA (m): sc-29788, BAP1 shRNA Plasmid (h): sc-29787-SH, BAP1 shRNA Plasmid (m): sc-29788-SH, BAP1 shRNA (h) Lentiviral Particles: sc-29787-V and BAP1 shRNA (m) Lentiviral Particles: sc-29788-V.

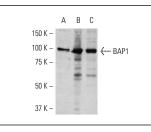
Molecular Weight of BAP1: 91 kDa.

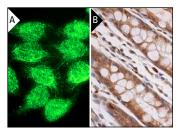
Positive Controls: A-431 whole cell lysate: sc-2201, SW480 cell lysate: sc-2219 or HeLa whole cell lysate: sc-2200.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA





BAP1 (H-300): sc-28236. Western blot analysis of BAP1 expression in A-431  $({\rm A}),$  HeLa  $({\rm B})$  and SW480  $({\rm C})$  whole cell lysates.

BAP1 (H-300): sc-28236. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing nuclear and cytoplasmic staining of glandular cells (B).

# SELECT PRODUCT CITATIONS

- Yu, H., et al. 2010. The ubiquitin carboxyl hydrolase BAP1 forms a ternary complex with YY1 and HCF-1 and is a critical regulator of gene expression. Mol. Cell. Biol. 30: 5071-5085.
- Daou, S., et al. 2015. The BAP1/ASXL2 histone H2A deubiquitinase complex regulates cell proliferation and is disrupted in cancer. J. Biol. Chem. 290: 28643-28663.

#### **STORAGE**

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

#### **RESEARCH USE**

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



Try BAP1 (C-4): sc-28383 or BAP1 (F-6): sc-48386,

our highly recommended monoclonal alternatives to BAP1 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **BAP1 (C-4):** sc-28383.