

# BAP1 (L-20): sc-8133

## 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 1863 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.
2. Narod, S.A., et al. 1991. Familial breast-ovarian cancer locus on chromosome 17q12-q23. *Lancet* 338: 82-83.
3. Futreal, P.A., et al. 1994. BRCA1 mutations in primary breast and ovarian carcinomas. *Science* 266: 120-122.
4. Novak, R. 1994. Breast cancer gene offers surprises. *Science* 265: 1796-1799.
5. Wu, L.C., et al. 1996. Identification of a RING protein that can interact *in vivo* with the BRCA1 gene product. *Nat. Genet.* 14: 430-440.
6. Jin, Y., et al. 1997. Cell cycle-dependent colocalization of BARD1 and BRCA1 proteins in discrete nuclear domains. *Proc. Natl. Acad. Sci. USA* 94: 12075-12080.
7. Jensen, D.E., et al. 1998. BAP1: a novel ubiquitin hydrolase which binds to the BRCA1 RING finger and enhances BRCA1-mediated cell growth suppression. *Oncogene* 16: 1097-1112.

## CHROMOSOMAL LOCATION

Genetic locus: BAP1 (human) mapping to 3p21.1.

## SOURCE

BAP1 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BAP1 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-8133 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

BAP1 (L-20) is recommended for detection of BAP1 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).

BAP1 (L-20) is also recommended for detection of BAP1 in additional species, including equine, canine, bovine, porcine and avian.

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

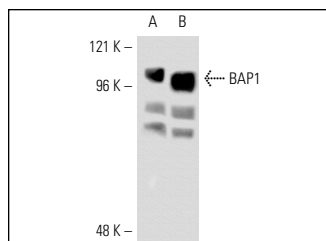
Molecular Weight of BAP1: 91 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, SW480 nuclear extract: sc-2155 or A-431 whole cell lysate: sc-2201.

## 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



BAP1 (L-20): sc-8133. Western blot analysis of BAP1 expression in MCF7 (A) and SW480 (B) nuclear extracts.

## STORAGE

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



Try **BAP1 (C-4): sc-28383** or **BAP1 (F-6): sc-48386**, our highly recommended monoclonal alternatives to BAP1 (L-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **BAP1 (C-4): sc-28383**.