

BAP1 (F-6): sc-48386

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. Novak, R. 1994. Breast cancer gene offers surprises. *Science* 265: 1796-1799.

CHROMOSOMAL LOCATION

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

SOURCE

BAP1 (F-6) is a mouse monoclonal antibody raised against amino acids 430-729 of BAP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BAP1 (F-6) 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 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 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.

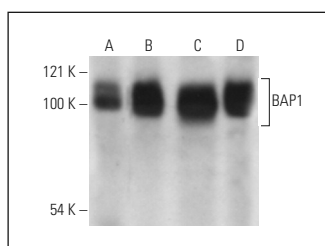
Molecular Weight of BAP1: 91 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or KNRK whole cell lysate: sc-2214.

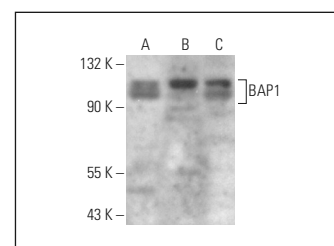
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



BAP1 (F-6): sc-48386. Western blot analysis of BAP1 expression in SK-BR-3 (A), KNRK (B), A-431 (C) and HeLa (D) whole cell lysates.



BAP1 (F-6): sc-48386. Western blot analysis of BAP1 expression in A-431 (A), PC-3 (B) and C6 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Fan, L.H., et al. 2012. BAP1 is a good prognostic factor in advanced non-small cell lung cancer. *Clin. Invest. Med.* 35: E182-E189.
2. Zhou, X.H., et al. 2012. HGFK1 is associated with a better prognosis and reverses inhibition by gefitinib in NSCLC cases. *Asian Pac. J. Cancer Prev.* 13: 1457-1461.

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.

PROTOCOLS

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

CONJUGATES

See **BAP1 (C-4): sc-28383** for BAP1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.