BAP1 (C-4): sc-28383

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.

CHROMOSOMAL LOCATION

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

SOURCE

BAP1 (C-4) is a mouse monoclonal antibody raised against amino acids 430-729 of BAP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BAP1 (C-4) is available conjugated to agarose (sc-28383 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-28383 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-28383 PE), fluorescein (sc-28383 FITC), Alexa Fluor® 488 (sc-28383 AF488), Alexa Fluor® 594 (sc-28383 AF594) or Alexa Fluor® 647 (sc-28383 AF647), 200 µg/ml, for IF, IHC(P) and FCM; and to each Alexa Fluor® 680 (sc-28383 AF680) or Alexa Fluor® 790 (sc-28383 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

BAP1 (C-4) is recommended for detection of BAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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), 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).

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: PC-3 cell lysate; sc-2220, KNRK whole cell lysate; sc-2214 or Jurkat whole cell lysate: sc-2204.

STORAGE

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

DATA

BAP1 (C-4) HRP: sc-28383 HRP. Direct western blot analysis of BAP1 expression in KNRK (A), PC-3 (B), A-431 (C), MCF7 (D) Jurkat (E) and THP-1 (F) whole cell lysates.

BAP1 (C-4) sc-28383. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear localization (A), Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts and Leydig cells (B).

SELECT PRODUCT CITATIONS


RESEARCH USE

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