

BAP31 (D-6): sc-393810

BACKGROUND

BAP31, a human Bcl-2-interacting protein, is an integral membrane protein that is a component of a protein complex in the endoplasmic reticulum. This protein complex mechanically bridges an apoptosis-initiating caspase, like procaspase-8, with the anti-apoptotic regulator Bcl-2 or Bcl-x_L. The cytosolic domain of BAP31 contains two identical caspase recognition sites, which are preferentially cleaved by initiator caspases, including caspase 8. Cleavage of BAP31 during apoptosis generates a p20 fragment, which remains integrated in the membrane and, when expressed ectopically, is a potent inducer of cell death. BAP31 cleavage is important for manifesting cytoplasmic apoptotic events associated with membrane fragmentation and in the cross talk between mitochondria and the endoplasmic reticulum during FAS-mediated apoptosis. The BAP31 gene is ubiquitously expressed in murine tissues and is located on the X chromosome in both mouse and human.

CHROMOSOMAL LOCATION

Genetic locus: BCAP31 (human) mapping to Xq28.

SOURCE

BAP31 (D-6) is a mouse monoclonal antibody raised against amino acids 157-246 mapping within a C-terminal cytoplasmic domain of BAP31 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.

BAP31 (D-6) is available conjugated to agarose (sc-393810 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393810 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393810 PE), fluorescein (sc-393810 FITC), Alexa Fluor® 488 (sc-393810 AF488), Alexa Fluor® 546 (sc-393810 AF546), Alexa Fluor® 594 (sc-393810 AF594) or Alexa Fluor® 647 (sc-393810 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393810 AF680) or Alexa Fluor® 790 (sc-393810 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

BAP31 (D-6) is recommended for detection of BAP31 of human origin by Western Blotting (starting dilution 1:100, 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), 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 BAP31 siRNA (h): sc-37283, BAP31 shRNA Plasmid (h): sc-37283-SH and BAP31 shRNA (h) Lentiviral Particles: sc-37283-V.

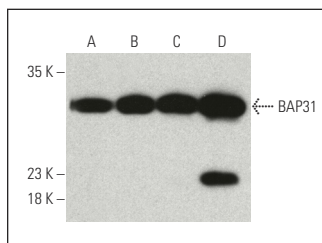
Molecular Weight of BAP31: 28 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, HL-60 whole cell lysate: sc-2209 or HeLa whole cell lysate: sc-2200.

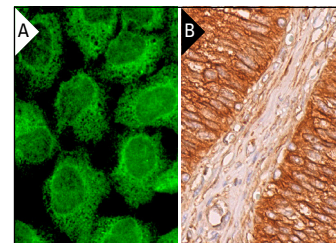
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



BAP31 (D-6) HRP: sc-393810 HRP. Direct western blot analysis of BAP31 expression in BJAB (A), HL-60 (B), HeLa (C) and T84 (D) whole cell lysates.



BAP31 (D-6): sc-393810. Immunofluorescence staining of formalin-fixed A-431 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic and membrane staining of glanular cells (B).

SELECT PRODUCT CITATIONS

- Gesslbauer, B., et al. 2018. Unbiased identification of proteins covalently modified by complex mixtures of peroxidized lipids using a combination of electrophoretic mobility band shift with mass spectrometry. *Antioxidants* 7: 116.
- Ding, X., et al. 2019. RAB2 regulates the formation of autophagosome and autolysosome in mammalian cells. *Autophagy* 15: 1774-1786.
- Jiang, X., et al. 2020. FAM134B oligomerization drives endoplasmic reticulum membrane scission for ER-phagy. *EMBO J.* 39: e102608.

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.