

BAP31 (B-10): sc-365347

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; Bcap31 (mouse) mapping to X A7.3.

SOURCE

BAP31 (B-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 137-161 within an internal region 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.

Blocking peptide available for competition studies, sc-365347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

BAP31 (B-10) is recommended for detection of BAP31 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BAP31 (B-10) is also recommended for detection of BAP31 in additional species, including canine and porcine.

Suitable for use as control antibody for BAP31 siRNA (h): sc-37283, BAP31 siRNA (m): sc-37284, BAP31 shRNA Plasmid (h): sc-37283-SH, BAP31 shRNA Plasmid (m): sc-37284-SH, BAP31 shRNA (h) Lentiviral Particles: sc-37283-V and BAP31 shRNA (m) Lentiviral Particles: sc-37284-V.

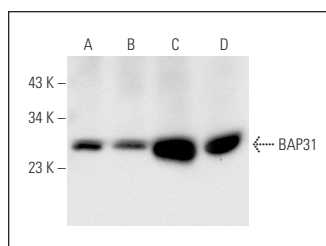
Molecular Weight of BAP31: 28 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HL-60 whole cell lysate: sc-2209 or MCF7 whole cell lysate: sc-2206.

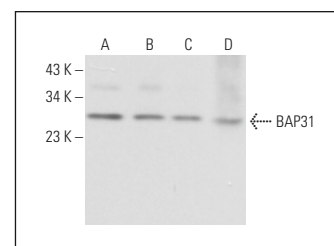
RECOMMENDED SUPPORT REAGENTS

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



BAP31 (B-10): sc-365347. Western blot analysis of BAP31 expression in Jurkat (A), HL-60 (B), U266 (C) and MCF7 (D) whole cell lysates.



BAP31 (B-10): sc-365347. Western blot analysis of BAP31 expression in HL-60 (A), K-562 (B) and A549 (C) whole cell lysates and rat liver tissue extract (D).

SELECT PRODUCT CITATIONS

- Kim, W.T., et al. 2015. Epitope mapping of antibodies suggests the novel membrane topology of B-cell receptor associated protein 31 on the cell surface of embryonic stem cells: the novel membrane topology of BAP31. *PLoS ONE* 10: e0130670.
- Kim, W.T., et al. 2017. Correction: epitope mapping of antibodies suggests the novel membrane topology of B-cell receptor associated protein 31 on the cell surface of embryonic stem cells: the novel membrane topology of BAP31. *PLoS ONE* 12: e0170145.
- Tuncay, E., et al. 2019. Zn²⁺-transporters ZIP7 and ZnT7 play important role in progression of cardiac dysfunction via affecting sarco(endo)plasmic reticulum-mitochondria coupling in hyperglycemic cardiomyocytes. *Mitochondrion* 44: 41-52.

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.