

Apollon (F-10): sc-390616

BACKGROUND

Inhibitor of apoptosis proteins (IAP) are a family of proteins that have baculovirus IAP repeat (BIR) domains and inhibits apoptosis. Apollon (also known as BRUCE or baculoviral IAP repeat-containing protein 6 (BIRC6)) is a large protein that binds to, ubiquitinates and facilitates proteasomal degradation of second mitochondria-derived activator of caspase (Smac) and caspase-9. Apollon can be associated with the membrane of the Golgi system and is expressed in brain cancer cells. Apollon may play a role in tumorigenesis and drug resistance of some brain cancer cell lines.

REFERENCES

- Chen, Z., et al. 1999. A human IAP-family gene, Apollon, expressed in human brain cancer cells. *Biochem. Biophys. Res. Commun.* 264: 847-854.
- Hao, Y., et al. 2004. Apollon ubiquitinates SMAC and caspase-9, and has an essential cytoprotection function. *Nat. Cell Biol.* 6: 849-860.
- Hitz, C., et al. 2005. Progressive loss of the spongioroblast layer of Birc6/Bruce mutants results in embryonic lethality. *Genesis* 42: 91-103.
- Ren, J., et al. 2005. The Birc6 (Bruce) gene regulates p53 and the mitochondrial pathway of apoptosis and is essential for mouse embryonic development. *Proc. Natl. Acad. Sci. USA* 102: 565-570.

CHROMOSOMAL LOCATION

Genetic locus: BIRC6 (human) mapping to 2p22.3; Birc6 (mouse) mapping to 17 E2.

SOURCE

Apollon (F-10) is a mouse monoclonal antibody raised against amino acids 121-420 mapping near the N-terminus of Apollon 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.

Apollon (F-10) is available conjugated to agarose (sc-390616 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390616 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390616 PE), fluorescein (sc-390616 FITC), Alexa Fluor® 488 (sc-390616 AF488), Alexa Fluor® 546 (sc-390616 AF546), Alexa Fluor® 594 (sc-390616 AF594) or Alexa Fluor® 647 (sc-390616 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390616 AF680) or Alexa Fluor® 790 (sc-390616 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

STORAGE

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

PROTOCOLS

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

APPLICATIONS

Apollon (F-10) is recommended for detection of Apollon 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), 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).

Apollon (F-10) is also recommended for detection of Apollon in additional species, including canine.

Suitable for use as control antibody for Apollon siRNA (h): sc-60194, Apollon siRNA (m): sc-60195, Apollon shRNA Plasmid (h): sc-60194-SH, Apollon shRNA Plasmid (m): sc-60195-SH, Apollon shRNA (h) Lentiviral Particles: sc-60194-V and Apollon shRNA (m) Lentiviral Particles: sc-60195-V.

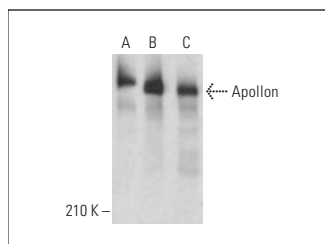
Molecular Weight of Apollon: 530 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Neuro-2A whole cell lysate: sc-364185 or IMR-32 cell lysate: sc-2409.

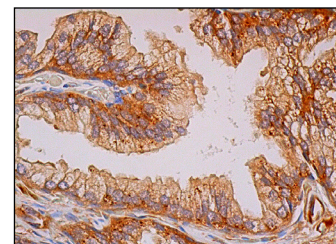
RECOMMENDED SUPPORT REAGENTS

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



Apollon (F-10): sc-390616. Western blot analysis of Apollon expression in HeLa (A), IMR-32 (B) and Neuro-2A (C) whole cell lysates.



Apollon (F-10): sc-390616. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells.

RESEARCH USE

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