

Apollon (C-16): sc-47814

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., Naito, M., Hori, S., Mashima, T., Yamori, T. and Tsuruo, T. 1999. A human IAP-family gene, Apollon, expressed in human brain cancer cells. *Biochem. Biophys. Res. Commun.* 264: 847-854.
- Hao, Y., Sekine, K., Kawabata, A., Nakamura, H., Ishioka, T., Ohata, H., Noda, T., Katayama, R., Hashimoto, C., Zhang, X., Tsuruo, T. and Naito, M. 2004. Apollon ubiquitinates smac and caspase-9, and has an essential cytoprotection function. *Nat. Cell Biol.* 6: 849-860.
- Hitz, C., Vogt-Weisenhorn, D., Ruiz, P., Wurst, W. and Floss, T. 2005. Progressive loss of the spongiotrophoblast layer of BIRC6/BRUCE mutants results in embryonic lethality. *Genesis* 42: 91-103.
- Ren, J., Shi, M., Liu, R., Yang, Q.H., Johnson, T., Skarnes, W.C. and Du, C. 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 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Apollon of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47813 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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 or our catalog for detailed protocols and support products.

APPLICATIONS

Apollon (C-16) is recommended for detection of Apollon of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (C-16) is also recommended for detection of Apollon in additional species, including equine, canine, bovine, porcine and avian.

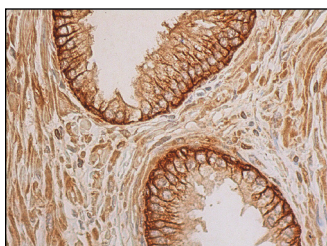
Suitable for use as control antibody for Apollon siRNA (h): sc-60194, Apollon siRNA (m): sc-60195, Apollon shRNA Plasmid (h): sc-60194-SH, Apollon shRNA Plasmid (m): sc-60195-SH, Apollon shRNA (h) Lentiviral Particles: sc-60194-V and Apollon shRNA (m) Lentiviral Particles: sc-60195-V.

Molecular Weight of Apollon: 530 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Apollon (C-16): sc-47814. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells and cytoplasmic staining of smooth muscle cells.

RESEARCH USE

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