

# Apollon (C-13): sc-47813

## 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 spongiontrophoblast 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-13) 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Apollon (C-13) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Apollon (C-13) 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.

## RESEARCH USE

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