SANTA CRUZ BIOTECHNOLOGY, INC.

Apollon (H-300): sc-135209



BACKGROUND

Inhibitor of apoptosis proteins (IAP) are a family of proteins that has 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. The gene BIRC6 that encodes for the Apollon protein localizes to chromosome 2p22.3. 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 (H-300) is a rabbit polyclonal antibody raised against amino acids 121-420 mapping near the N-terminus of Apollon of human origin.

PRODUCT

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

STORAGE

Store at 4° C, **D0 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 or our catalog for detailed protocols and support products.

APPLICATIONS

Apollon (H-300) is recommended for detection of Apollon of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Apollon (H-300) is also recommended for detection of Apollon in additional species, including equine, canine, bovine 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.