

Apollon (4): sc-136214

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

1. 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.
2. 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.
3. Hitz, C., Vogt-Weisenhorn, D., Ruiz, P., Wurst, W. and Floss, T. 2005. Progressive loss of the spongiorhoblast layer of BIRC6/BRUCE mutants results in embryonic lethality. *Genesis* 42: 91-103.
4. 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 (4) is a mouse monoclonal antibody raised against amino acids 372-571 of Apollon of mouse origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136214 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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 (4) is recommended for detection of Apollon of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

RESEARCH USE

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