SANTA CRUZ BIOTECHNOLOGY, INC.

AZ1 (N-16): sc-28426

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Antizyme 1 (AZ1) negatively regulates polyamine synthesis by enhancing the negative feedback loop controlling ornithine decarboxylase (ODC) activity. Polyamines are involved in cell cycle and cell growth, and thus the interaction between AZ1 and ODC functions in this process as well, in a regulatory manner. Furthermore, treatment of cells with leptomycin B, an inhibitor of chromosomal maintenance proteins, causes the relocation of AZ1 to the nucleus, suggesting a novel function of AZ1 not associated with the proteasome.

REFERENCES

1. Aoto, H., et al. 1997. Genomic organization of the mouse AZ1 gene that encodes the protein localized to preacrosomes of spermatids. Genomics 40: 138-141. PMID 9070930
2. Zhang, M., et al. 2003. Determinants of proteasome recognition of ornithine decarboxylase, a ubiquitin-independent substrate. EMBO J. 22: 1488-1496.
3. Levillain, O., et al. 2003. Influence of testosterone on regulation of ODC, antizyme, and N1-SSAT gene expression in mouse kidney. Am. J. Physiol. Renal. Physiol. 285: 498-506.
4. Murai, N., et al. 2003. Identification of nuclear export signals in antizyme-1. J. Biol. Chem. 278: 44791-44798.
5. Schipper, R.G., et al. 2004. Intracellular localization of ornithine decarboxylase and its regulatory protein, antizyme-1. J. Histochem. Cytochem. 52: 1259-1266. PMID 15385572

SOURCE

AZ1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of AZ1 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-28426 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

AZ1 (N-16) is recommended for detection of AZ1 of mouse, rat and human 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).

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.