

AZ2 (H-76): sc-366561

BACKGROUND

Members of the Antizyme (AZ) family are proteins that negatively regulate cellular polyamine synthesis and uptake. Three members, AZ1, AZ2 and AZ3, have been characterized to date. AZ1 and AZ2 have a broad tissue distribution, while AZ3 is expressed exclusively in testis. AZ2 (antizyme 2), also known as OAZ2 (ornithine decarboxylase antizyme 2) or ODC-Az 2, is a 189 amino acid protein that binds to ornithine decarboxylase (ODC), inactivates it, and targets it for degradation. The human and mouse AZ2 protein sequences differ by only one amino acid. One named isoform of AZ2 is produced by ribosomal frameshifting, which occurs between the codons for Ser 32 and Asp 33. An autoregulatory mechanism enables modulation of frameshifting according to the cellular concentration of polyamines.

REFERENCES

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5. Chen, H., MacDonald, A. and Coffino, P. 2002. Structural elements of antizymes 1 and 2 are required for proteasomal degradation of ornithine decarboxylase. J. Biol. Chem. 277: 45957-45961.
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CHROMOSOMAL LOCATION

Genetic locus: OAZ2 (human) mapping to 15q22.31; Oaz2 (mouse) mapping to 9 C.

SOURCE

AZ2 (H-76) is a rabbit polyclonal antibody raised against amino acids 49-124 mapping within an internal region of AZ2 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.

APPLICATIONS

AZ2 (H-76) is recommended for detection of AZ2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

AZ2 (H-76) is also recommended for detection of AZ2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for AZ2 siRNA (m): sc-141420, AZ2 siRNA (r): sc-156111, AZ2 shRNA Plasmid (m): sc-141420-SH, AZ2 shRNA Plasmid (r): sc-156111-SH, AZ2 shRNA (m) Lentiviral Particles: sc-141420-V and AZ2 shRNA (r) Lentiviral Particles: sc-156111-V.

Molecular Weight of AZ2: 21 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

STORAGE

Store at 4° C, **DO 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.