

AMZ2 (H-270): sc-135116

BACKGROUND

AMZ2 (archaelysin family metalloproteinase 2), also known as archaemetzincin-2 or archeobacterial metalloproteinase-like protein 2, is a 360 amino acid protein belonging to the peptidase M54 family. Encoded by a gene that maps to human chromosome 17q24.2, AMZ2 is predominantly expressed in heart and testis. AMZ2 is also expressed in kidney, liver, pancreas, lung, brain and placenta, and in fetal tissues such as kidney, liver, lung and brain. AMZ2 participates in metal ion binding and functions as a zinc metalloprotease. AMZ2 is inhibited by both general metalloprotease inhibitors o-phenanthroline and batimastat. Exhibiting aminopeptidase activity, AMZ2 acts against Angiotensin *in vitro*, but does not hydrolyze either Neurogranin or Angiotensin. AMZ2 is also significantly inhibited by Epimastatin hydrochloride, an aminopeptidase inhibitor.

REFERENCES

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- Peñalver-Mellado, M., et al. 2006. Recruitment of a novel zinc-bound transcriptional factor by a bacterial HMGA-type protein is required for regulating multiple processes in *Myxococcus xanthus*. *Mol. Microbiol.* 61: 910-926.
- Quesada, V., et al. 2009. The Degradome database: mammalian proteases and diseases of proteolysis. *Nucleic Acids Res.* 37: D239-D243.
- Elías-Arnanz, M., et al. 2010. The regulatory action of the myxobacterial CarD/CarG complex: a bacterial enhanceosome? *FEMS Microbiol. Rev.* 34: 764-778.
- Waltersperger, S., et al. 2010. Crystal structure of archaemetzincin amza from *Methanopyrus kandleri* at 1.5 Å resolution. *Proteins* 78: 2720-2723.

CHROMOSOMAL LOCATION

Genetic locus: AMZ2 (human) mapping to 17q24.2; Amz2 (mouse) mapping to 11 E1.

SOURCE

AMZ2 (H-270) is a rabbit polyclonal antibody raised against amino acids 1-270 mapping at the N-terminus of AMZ2 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.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

AMZ2 (H-270) is recommended for detection of AMZ2 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).

AMZ2 (H-270) is also recommended for detection of AMZ2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for AMZ2 siRNA (h): sc-94228, AMZ2 siRNA (m): sc-141057, AMZ2 shRNA Plasmid (h): sc-94228-SH, AMZ2 shRNA Plasmid (m): sc-141057-SH, AMZ2 shRNA (h) Lentiviral Particles: sc-94228-V and AMZ2 shRNA (m) Lentiviral Particles: sc-141057-V.

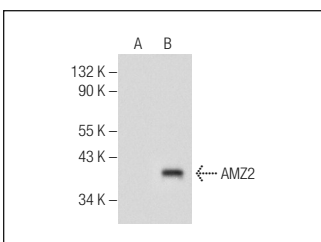
Molecular Weight of AMZ2: 41 kDa.

Positive Controls: AMZ2 (m): 293T Lysate: sc-124966, A-10 cell lysate: sc-3806 or Hep G2 cell lysate: sc-2227.

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.

DATA



AMZ2 (H-270): sc-135116. Western blot analysis of AMZ2 expression in non-transfected: sc-117752 (A) and mouse AMZ2 transfected: sc-124966 (B) 293T whole cell lysates.

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.