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OAZ1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7477A

Specification

OAZ1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P54368
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**2-31**

OAZ1 Antibody (N-term) - Additional Information

Gene ID 4946

Other Names
Ornithine decarboxylase antizyme 1, ODC-Az, OAZ1, OAZ

Target/Specificity
This OAZ1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-31 amino acids from the N-terminal region of human OAZ1.

Dilution
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
OAZ1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

OAZ1 Antibody (N-term) - Protein Information

Name OAZ1

Synonyms OAZ

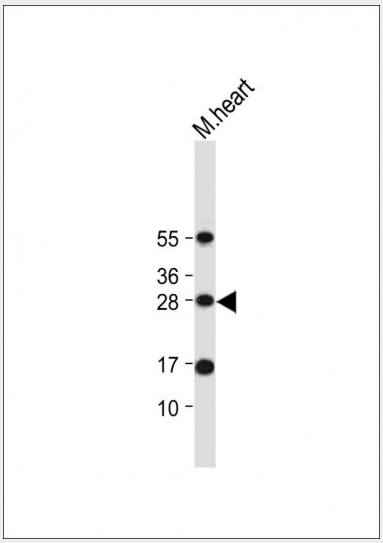
Function Ornithine decarboxylase (ODC) antizyme protein that negatively regulates ODC activity and intracellular polyamine biosynthesis and uptake in response to increased intracellular polyamine levels. Binds to ODC monomers, inhibiting the assembly of the functional ODC homodimer, and targets the monomers for ubiquitin- independent proteolytic destruction by the 26S proteasome (PubMed:17900240, PubMed:26305948, PubMed:26443277). Triggers ODC degradation by inducing the exposure of a cryptic proteasome- interacting surface of ODC (PubMed:26305948). Stabilizes AZIN2 by interfering with its ubiquitination (PubMed:17900240). Also inhibits cellular uptake of polyamines by inactivating the polyamine uptake transporter. SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. Involved in the translocation of AZIN2 from ER-Golgi intermediate compartment (ERGIC) to the cytosol (PubMed:12097147).

OAZ1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OAZ1 Antibody (N-term) - Images



Anti-OAZ1 Antibody (N-term) at 1:2000 dilution + Mouse heart tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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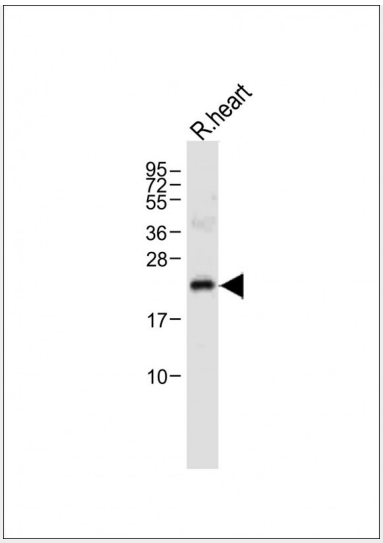

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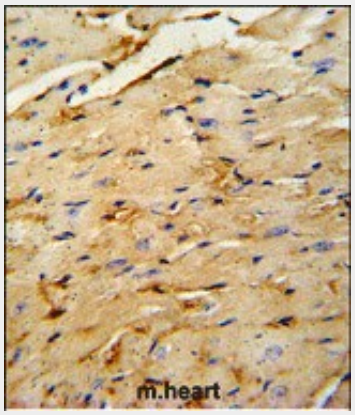

Formalin-fixed and paraffin-embedded mouse heart tissue reacted with OAZ1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

OAZ1 Antibody (N-term) - Background

OAZ1 catalyzes the conversion of ornithine to putrescine in the first and apparently rate-limiting step in polyamine biosynthesis. This protein play a role in the regulation of polyamine synthesis by binding to and inhibiting ornithine decarboxylase. The protein expression is auto-regulated by polyamine-enhanced translational frameshifting.

OAZ1 Antibody (N-term) - References

Grimwood J., Gordon L.A.Nature 428:529-535(2004)
Hayashi T., Matsufuji S.Gene 203:131-139(1997)
Tewari D.S., Qian Y.Biochim. Biophys. Acta 1209:293-295(1994)