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OAZ1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7477a

Specification

OAZ1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P54368

OAZ1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 4946

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7477a was selected from the N-term region of human OAZ1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OAZ1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

OAZ1 Antibody (N-term) Blocking Peptide - Images

OAZ1 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)