

Product Name: AZ1 Rabbit Polyclonal Antibody**Catalog #: APRab07393**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	

Antigen Information

Gene Name	OAZ1
Alternative Names	OAZ1; OAZ; Ornithine decarboxylase antizyme 1; ODC-Az
Gene ID	4946.0
SwissProt ID	P54368
Immunogen	The antiserum was produced against synthesized peptide derived from human OAZ1. AA range:14-63

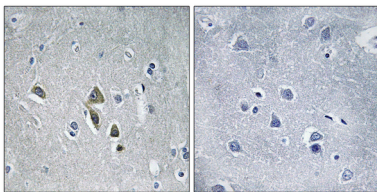
Background

The protein encoded by this gene belongs to the ornithine decarboxylase antizyme family, which plays a role in cell growth and

proliferation by regulating intracellular polyamine levels. Expression of antizymes requires +1 ribosomal frameshifting, which is enhanced by high levels of polyamines. Antizymes in turn bind to and inhibit ornithine decarboxylase (ODC), the key enzyme in polyamine biosynthesis; thus, completing the auto-regulatory circuit. This gene encodes antizyme 1, the first member of the antizyme family, that has broad tissue distribution, and negatively regulates intracellular polyamine levels by binding to and targeting ODC for degradation, as well as inhibiting polyamine uptake. Antizyme 1 mRNA contains two potential in-frame AUGs; and studies in rat suggest that alternative use of the two translation initiation sites results in N-terminally distinct protein isoforms. A ribosomal frameshift occurs between the codons for Ser-68 and Asp-69. An autoregulatory mechanism enables modulation of frameshifting according to the cellular concentration of polyamines. **function:** Binds to, and destabilizes, ornithine decarboxylase which is then degraded. Also inhibits cellular uptake of polyamines by inactivating the polyamine uptake transporter. **similarity:** Belongs to the ODC antizyme family.

Research Area

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using OAZ1 Antibody. The picture on the right is blocked with the synthesized peptide.