

**ALDH7A1 Antibody (N-term) Blocking Peptide**

Synthetic peptide  
Catalog # BP7875a

**Specification**

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**ALDH7A1 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [P49419](#)

**ALDH7A1 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 501

**Other Names**

Alpha-aminoadipic semialdehyde dehydrogenase, Alpha-AASA dehydrogenase, Aldehyde dehydrogenase family 7 member A1, Antiquitin-1, Betaine aldehyde dehydrogenase, Delta1-piperidine-6-carboxylate dehydrogenase, P6c dehydrogenase, ALDH7A1, ATQ1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7875a](/products/AP7875a) was selected from the N-term region of human ALDH7A1. 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.

**ALDH7A1 Antibody (N-term) Blocking Peptide - Protein Information**

Name ALDH7A1 ([HGNC:877](#))

Synonyms ATQ1

**Function**

Multifunctional enzyme mediating important protective effects. Metabolizes betaine aldehyde to betaine, an important cellular osmolyte and methyl donor. Protects cells from oxidative stress by metabolizing a number of lipid peroxidation-derived aldehydes. Involved in lysine catabolism.

**Cellular Location**

[Isoform 2]: Cytoplasm, cytosol. Nucleus

**Tissue Location**

Abundant in hepatoma cells and fetal cochlea, ovary, eye, heart, adrenal gland, liver and kidney. Low levels present in adult peripheral blood leukocytes and fetal brain, thymus, spleen, skeletal muscle, lung and tongue.

### **ALDH7A1 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **ALDH7A1 Antibody (N-term) Blocking Peptide - Images**

### **ALDH7A1 Antibody (N-term) Blocking Peptide - Background**

ALDH4A1 belongs to the aldehyde dehydrogenase family of proteins. This enzyme is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Deficiency of this enzyme is associated with type II hyperprolinemia, an autosomal recessive disorder characterized by accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline.

### **ALDH7A1 Antibody (N-term) Blocking Peptide - References**

Yoon,K.A., J. Hum. Genet. 49 (3), 134-140 (2004)Geraghty,M.T., Hum. Mol. Genet. 7 (9), 1411-1415 (1998)