

**ALDH7A1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7876a****Specification**

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

Primary Accession [P49419](#)  
Other Accession [NP\\_001173](#)

**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 [AP7876a](/products/AP7876a) 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**

Antiquitin is a member of subfamily 7 in the aldehyde dehydrogenase gene family. These enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. This particular member has homology to a previously described protein from the green garden pea, the 26g pea turgor protein. Mutations in ALDH7A1 gene cause pyridoxine-dependent epilepsy, which involves a combination of various seizure types and is responsive to immediate administration of pyridoxine hydrochloride.

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

Kanno,J., Mol. Genet. Metab. 91 (4), 384-389 (2007)Plecko,B., Hum. Mutat. 28 (1), 19-26 (2007)