

ALDH3A1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7849c**Specification**

ALDH3A1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P30838](#)**ALDH3A1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 218**Other Names**

Aldehyde dehydrogenase, dimeric NADP-preferring, ALDHIII, Aldehyde dehydrogenase 3, Aldehyde dehydrogenase family 3 member A1, ALDH3A1, ALDH3

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7849c](/products/AP7849c) was selected from the Center region of human ALDH3A1. 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.

ALDH3A1 Antibody (Center) Blocking Peptide - Protein Information**Name** ALDH3A1**Synonyms** ALDH3**Function**

ALDHs play a major role in the detoxification of alcohol- derived acetaldehyde (Probable). They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation (Probable). Oxidizes medium and long chain aldehydes into non-toxic fatty acids (PubMed:[1737758](http://www.uniprot.org/citations/1737758)). Preferentially oxidizes aromatic aldehyde substrates (PubMed:[1737758](http://www.uniprot.org/citations/1737758)). Comprises about 50 percent of corneal epithelial soluble proteins (By similarity). May play a role in preventing corneal damage caused by ultraviolet light (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P47739}.

Tissue Location

High levels in stomach, esophagus and lung; low level in the liver and kidney

ALDH3A1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ALDH3A1 Antibody (Center) Blocking Peptide - Images**ALDH3A1 Antibody (Center) Blocking Peptide - Background**

Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. ALDH3A1 forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. The enzyme is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea.

ALDH3A1 Antibody (Center) Blocking Peptide - References

Glatt,H., Arch. Biochem. Biophys. 477 (2), 196-205 (2008)Ekhart,C., Pharmacogenet. Genomics 18 (6), 515-523 (2008)Giebultowicz,J., Acta Pol Pharm 65 (1), 81-84 (2008)