

### ALDH1A3 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP7847a

## Specification

## ALDH1A3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P47895</u>

## ALDH1A3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 220

**Other Names** 

Aldehyde dehydrogenase family 1 member A3, Aldehyde dehydrogenase 6, Retinaldehyde dehydrogenase 3, RALDH-3, RalDH3, ALDH1A3, ALDH6

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7847a>AP7847a</a> was selected from the N-term region of human ALDH1A3. 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.

## ALDH1A3 Antibody (N-term) Blocking Peptide - Protein Information

Name ALDH1A3

Synonyms ALDH6 {ECO:0000303|PubMed:7698756}

# Function

Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and all-trans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and all-trans- 13,14-dihydroretinoate, respectively (By similarity) (PubMed:<a

href="http://www.uniprot.org/citations/27759097" target="\_blank">27759097</a>). High specificity for all-trans-retinal as substrate, can also accept acetaldehyde as substrate in vitro but with lower affinity (PubMed:<a href="http://www.uniprot.org/citations/27759097" target="\_blank">27759097</a>). Required for the biosynthesis of normal levels of retinoate in the embryonic ocular and nasal regions; a critical lipid in the embryonic development of the eye and the nasal region (By similarity).



Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q9JHW9}.

### **Tissue Location**

Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

## ALDH1A3 Antibody (N-term) Blocking Peptide - Protocols

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

### Blocking Peptides

## ALDH1A3 Antibody (N-term) Blocking Peptide - Images

## ALDH1A3 Antibody (N-term) Blocking Peptide - Background

Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The enzyme ALDH1A3 uses retinal as a substrate, either in a free or cellular retinol-binding protein form.

## ALDH1A3 Antibody (N-term) Blocking Peptide - References

Rexer, B.N., Cancer Res. 61 (19), 7065-7070 (2001)Yoshida, A., Eur. J. Biochem. 251 (3), 549-557 (1998)