

#### ALDH3B1 Antibody (Center) Blocking Peptide Synthetic peptide

Catalog # BP8706c

## Specification

# ALDH3B1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

## <u>P43353</u>

## ALDH3B1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 221

**Other Names** Aldehyde dehydrogenase family 3 member B1, Aldehyde dehydrogenase 7, ALDH3B1, ALDH7

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8706c>AP8706c</a> was selected from the Center region of human ALDH3B1. 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.

## ALDH3B1 Antibody (Center) Blocking Peptide - Protein Information

Name ALDH3B1

Synonyms ALDH7

Function

Oxidizes medium and long chain saturated and unsaturated fatty aldehydes generated in the plasma membrane into non-toxic fatty acids (PubMed:<a

href="http://www.uniprot.org/citations/17382292" target="\_blank">17382292</a>, PubMed:<a href="http://www.uniprot.org/citations/23721920" target="\_blank">23721920</a>). May have a protective role against the cytotoxicity induced by lipid peroxidation (PubMed:<a

href="http://www.uniprot.org/citations/17382292" target="\_blank">17382292</a>). Short-chain fatty aldehydes are not good substrates (PubMed:<a

href="http://www.uniprot.org/citations/17382292" target="\_blank">17382292</a>). Can use both NADP(+) and NAD(+) as electron acceptor in vitro, however in vivo preference will depend on their tissue levels (PubMed:<a href="http://www.uniprot.org/citations/17382292"



target="\_blank">17382292</a>). Low activity towards acetaldehyde and 3,4dihydroxyphenylacetaldehyde (PubMed:<a href="http://www.uniprot.org/citations/17382292" target="\_blank">17382292</a>, PubMed:<a href="http://www.uniprot.org/citations/23721920" target="\_blank">23721920</a>). Able to metabolize aromatic aldehydes such as benzaldehyde to their acid form (PubMed:<a href="http://www.uniprot.org/citations/17382292" target="\_blank">17382292</a>).

# **Cellular Location** Cell membrane; Lipid-anchor. Note=Primarily in the plasma membrane as well as in some punctate structures in the cytoplasm

**Tissue Location** Highest expression in kidney and lung.

## ALDH3B1 Antibody (Center) Blocking Peptide - Protocols

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

#### <u>Blocking Peptides</u>

ALDH3B1 Antibody (Center) Blocking Peptide - Images

## ALDH3B1 Antibody (Center) Blocking Peptide - Background

The aldehyde dehydrogenases are a family of isozymes that may play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation.

## ALDH3B1 Antibody (Center) Blocking Peptide - References

Marchitti, S.A., et.al., Biochem. Biophys. Res. Commun. 356 (3), 792-798 (2007)