

## **ALDH3B1** Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3241a

### **Specification**

## ALDH3B1 Antibody (internal region) - Product Information

Application WB, E
Primary Accession P43353

Other Accession <u>NP\_000685.1</u>, <u>221</u>

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 51840

### ALDH3B1 Antibody (internal region) - Additional Information

#### Gene ID 221

## **Other Names**

Aldehyde dehydrogenase family 3 member B1, 1.2.1.5, Aldehyde dehydrogenase 7, ALDH3B1, ALDH7

#### **Dilution**

WB~~1:1000

E~~N/A

# **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

ALDH3B1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

### ALDH3B1 Antibody (internal region) - 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 3,4-dihydroxyphenylacetaldehyde (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.

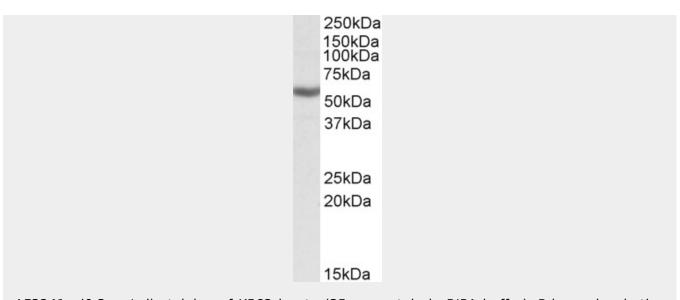
## ALDH3B1 Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ALDH3B1	Antibody	(internal	region)	) –	<b>Images</b>
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AF3241a (0.3  $\mu$ g/ml) staining of K562 lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# ALDH3B1 Antibody (internal region) - Background

This antibody is expected to recognize isoform a (NP\_000685.1) only. This antibody is not expected to cross react with ALDH3B2.

Reported variants represent identical protein: NP 000685.1, NP 001154945.1

## ALDH3B1 Antibody (internal region) - References

Evidence of epistasis between the catechol-O-methyltransferase and aldehyde dehydrogenase 3B1 genes in paranoid schizophrenia. Wang Y, Hu Y, Fang Y, Zhang K, Yang H, Ma J, Xu Q, Shen Y, Biological psychiatry 2009 Jun 65 (12): 1048-54. PMID: 19159868