

# **ALDH3B1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8706C

## **Specification**

# **ALDH3B1** Antibody (Center) - Product Information

Application IHC-P, WB,E Primary Accession P43353

Other Accession Q5XI42, E9Q3E1

Reactivity
Predicted
Rat, Mouse
Host
Clonality
Polyclonal
Isotype
Rabbit IgG
Antigen Region
Rat, Mouse
Rabbit
Rabbit
Rabbit
Rabbit IgG
334-360

## ALDH3B1 Antibody (Center) - Additional Information

#### Gene ID 221

### **Other Names**

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

### Target/Specificity

This ALDH3B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 334-360 amino acids from the Central region of human ALDH3B1.

# **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

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

#### **Precautions**

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

# ALDH3B1 Antibody (Center) - 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:<u>17382292</u>, PubMed:<u>23721920</u>). May have a protective role against the cytotoxicity induced by lipid peroxidation (PubMed:<u>17382292</u>). Short-chain fatty aldehydes are not good substrates (PubMed:<u>17382292</u>). Can use both NADP(+) and NAD(+) as electron acceptor in vitro, however in vivo preference will depend on their tissue levels (PubMed:<u>17382292</u>). Low activity towards acetaldehyde and 3,4-dihydroxyphenylacetaldehyde (PubMed:<u>17382292</u>, PubMed:<u>23721920</u>). Able to metabolize aromatic aldehydes such as benzaldehyde to their acid form (PubMed:<u>17382292</u>).

### **Cellular Location**

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

### **Tissue Location**

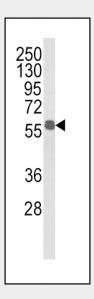
Highest expression in kidney and lung.

# **ALDH3B1 Antibody (Center) - Protocols**

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

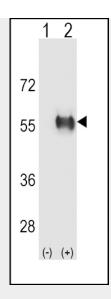
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## ALDH3B1 Antibody (Center) - Images

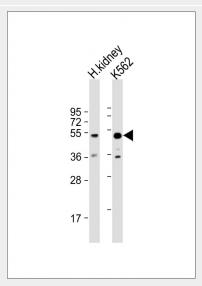


Western blot analysis of ALDH3B1 Antibody (Center) (Cat. #AP8706c) in MDA-MB231 cell line lysates (35ug/lane). ALDH3B1 (arrow) was detected using the purified Pab.



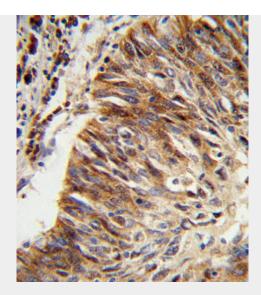


Western blot analysis of ALDH3B1 (arrow) using rabbit polyclonal ALDH3B1 Antibody (Center) (Cat. #AP8706c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the ALDH3B1 gene.



All lanes: Anti-ALDH3B1 Antibody (Center) at 1:1000 dilution Lane 1: human kidney lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human lung carcinoma reacted with ALDH3B1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# ALDH3B1 Antibody (Center) - 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) - References**

Marchitti,S.A., et.al., Biochem. Biophys. Res. Commun. 356 (3), 792-798 (2007) **ALDH3B1 Antibody (Center) - Citations** 

• Aldehyde dehydrogenases contribute to skeletal muscle homeostasis in healthy, aging, and Duchenne muscular dystrophy patients