

**ALDH3A1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7849A**

**Specification**

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**ALDH3A1 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P30838</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50395
Antigen Region	69-99

**ALDH3A1 Antibody (N-term) - 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**

This ALDH3A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 69-99 amino acids from the N-terminal region of human ALDH3A1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

ALDH3A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ALDH3A1 Antibody (N-term) - 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](#)). Preferentially oxidizes aromatic aldehyde substrates (PubMed:[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

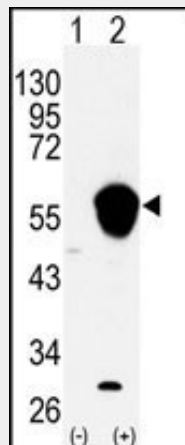
High levels in stomach, esophagus and lung; low level in the liver and kidney

## ALDH3A1 Antibody (N-term) - Protocols

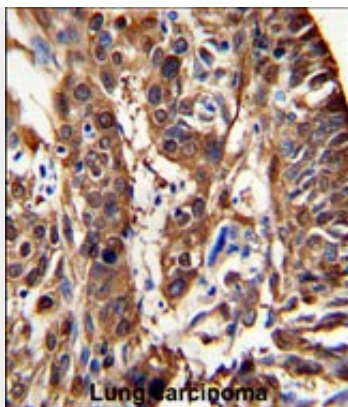
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

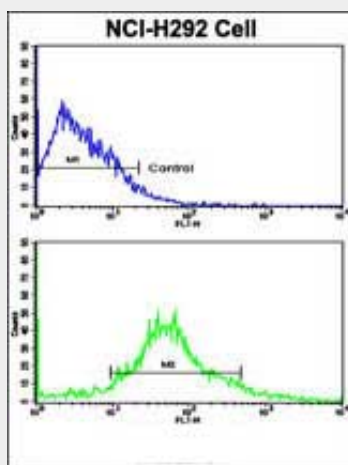
## ALDH3A1 Antibody (N-term) - Images



Western blot analysis of ALDH3A1 (arrow) using rabbit polyclonal ALDH3A1 Antibody (N-term) (Cat.#AP7849a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ALDH3A1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with ALDH3A1 Antibody (N-term), 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.



Flow cytometric analysis of NCI-H292 cells using ALDH3A1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **ALDH3A1 Antibody (N-term) - 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 (N-term) - 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)