

**Anti-ALDH1A1 (N-terminal region) Antibody**  
Catalog # AN1628**Specification****Anti-ALDH1A1 (N-terminal region) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P00352</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG2a
Calculated MW	54862

**Anti-ALDH1A1 (N-terminal region) Antibody - Additional Information**

Gene ID	216
<b>Other Names</b>	RALDH, ALDH-E1, ALHDII, Aldehyde dehydrogenase, ALDC, PUMB1, ALDH1A1

**Target/Specificity**

Aldehyde dehydrogenase (ALDH) superfamily is a ubiquitous group of enzymes found in all taxonomic domains. ALDH detoxifies endogenous and exogenous aldehydes, protecting cellular homeostasis and organismal functions. These enzymes are necessary for the synthesis of retinoic acid, betaine, and folate. Recent studies have reported high levels of ALDH found in cancer cells, suggesting that ALDH can act as a marker for cancer cells found in a wide variety of tissues including skin, prostate, lung, and neural tissues. Additionally, certain diseases can be identified when ALDH activity is absent. ALDH1A1 is vital for retinol synthesis and alcohol metabolism. ALDH1A1 active sites include an active cysteine residue, which catalyses the transformation of aldehydes into their respective carboxylic groups. ALDH1A1 amino acid sequence and function is highly conserved in humans and rodents.

**Dilution**

WB~~1:1000

**Format**

Protein G Purified

**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**

Anti-ALDH1A1 (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

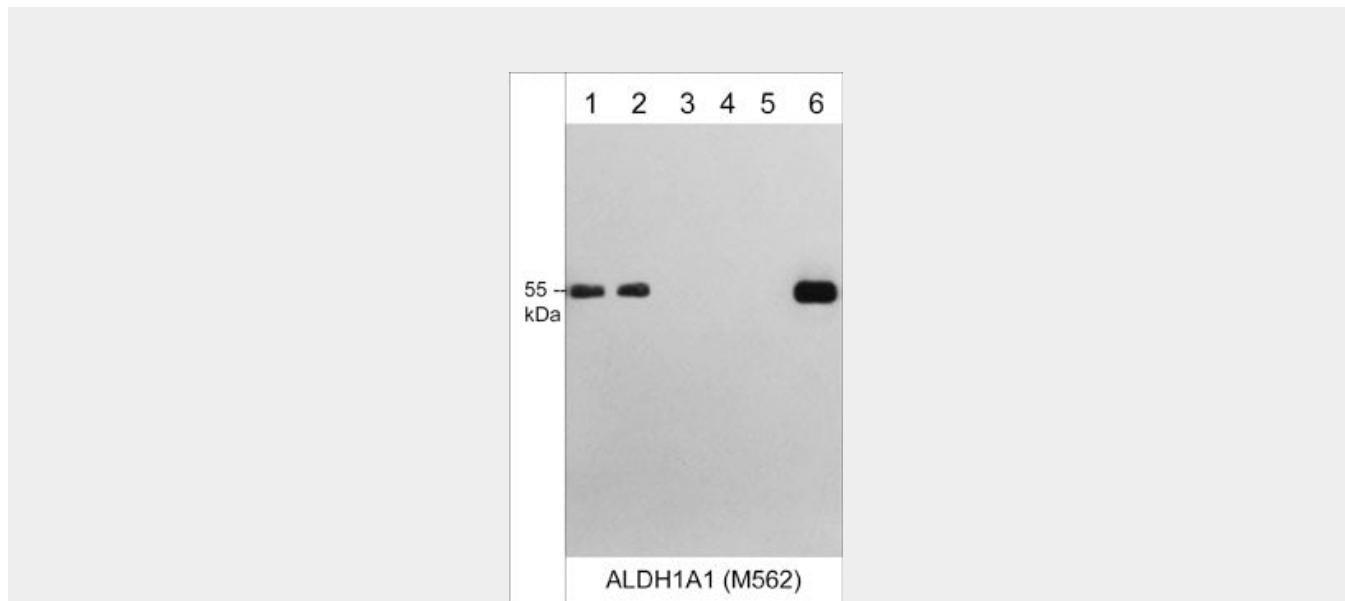
Blue Ice

**Anti-ALDH1A1 (N-terminal region) Antibody - Protocols**

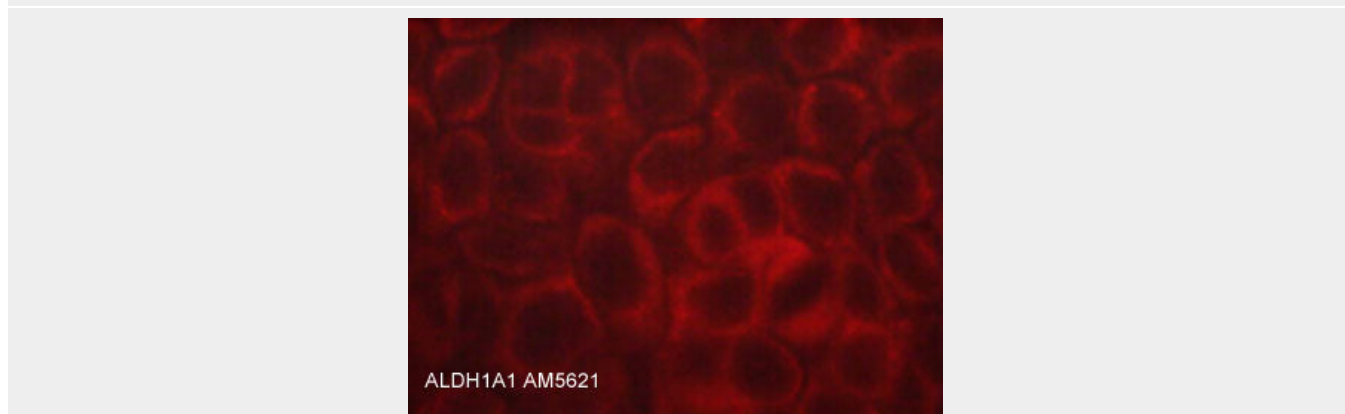
Provided below are standard protocols that you may find useful for product applications.

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

#### Anti-ALDH1A1 (N-terminal region) Antibody - Images



Western blot image of human A431 (lane 1), HepG2 (lane 2), PC3 (lane 3), Jurkat (lane 4), bovine tubulin (lane 5), and recombinant human ALDH1A1 (lane 6). The blot was probed with mouse monoclonal ALDH1A1 M562 (lanes 1-6) at a dilution of 1:1,000.



Immunocytochemical labeling of ALDH1A1 in aldehyde fixed and NP-40 permeabilized human A431 cells. The cells were labeled with mouse monoclonal anti-ALDH1A1 (AM5621). The antibody was detected using goat anti-mouse DyLight® 594.

#### Anti-ALDH1A1 (N-terminal region) Antibody - Background

Aldehyde dehydrogenase (ALDH) superfamily is a ubiquitous group of enzymes found in all taxonomic domains. ALDH detoxifies endogenous and exogenous aldehydes, protecting cellular homeostasis and organismal functions. These enzymes are necessary for the synthesis of retinoic

acid, betaine, and folate. Recent studies have reported high levels of ALDH found in cancer cells, suggesting that ALDH can act as a marker for cancer cells found in a wide variety of tissues including skin, prostate, lung, and neural tissues. Additionally, certain diseases can be identified when ALDH activity is absent. ALDH1A1 is vital for retinol synthesis and alcohol metabolism. ALDH1A1 active sites include an active cysteine residue, which catalyses the transformation of aldehydes into their respective carboxylic groups. ALDH1A1 amino acid sequence and function is highly conserved in humans and rodents.