

**KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody**  
**Mouse monoclonal antibody**  
**Catalog # AGI2441****Specification****KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P47895</a>
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	Predicted, 56 kDa; observed, 56 kDa KDa
Gene Name	ALDH1A3
Aliases	ALDH1A3; Aldehyde Dehydrogenase 1 Family Member A3; Retinaldehyde Dehydrogenase 3; RALDH3; ALDH6; Aldehyde Dehydrogenase 6; Aldehyde Dehydrogenase 1 Family, Member A3; Aldehyde Dehydrogenase Family 1 Member A3; Acetaldehyde Dehydrogenase 6; EC 1.2.1.36; EC 1.2.1; ALDH1A6; RALDH-3; RalDH3; MCOP8
Immunogen	Recombinant protein of human ALDH1A3

**KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Additional Information**

Gene ID	220
<b>Other Names</b>	
Retinaldehyde dehydrogenase 3, RALDH-3, RalDH3, 1.2.1.36, Aldehyde dehydrogenase 6, Aldehyde dehydrogenase family 1 member A3, ALDH1A3, ALDH1A3, ALDH6 {ECO:0000303 PubMed:7698756}	

**KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Protein Information****Name** ALDH1A3**Synonyms** ALDH6 {ECO:0000303|PubMed:7698756}**Function**

Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and all-trans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and all-trans-13,14-dihydroretinoate, respectively (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/27759097" target="\_blank">27759097</a>). High specificity for all-trans-retinal as substrate, can also accept acetaldehyde as substrate in vitro but with lower affinity (PubMed:<a href="http://www.uniprot.org/citations/27759097" target="\_blank">27759097</a>). Required for the biosynthesis of normal levels of retinoate in the embryonic ocular and nasal regions; a critical lipid in the embryonic development of the eye and the nasal region (By similarity).

### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9JHW9}.

### Tissue Location

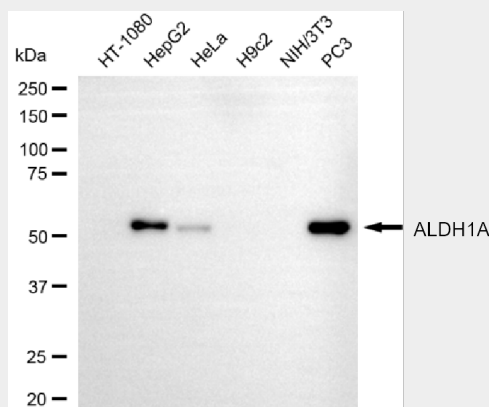
Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

## KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Protocols

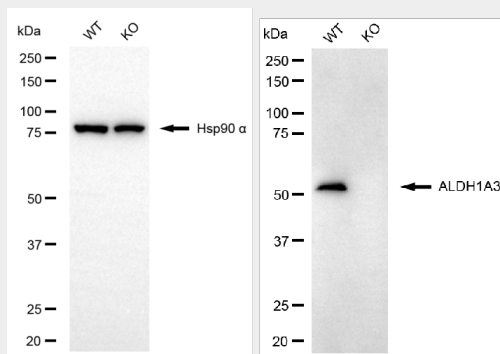
Provided below are standard protocols that you may find useful for product applications.

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

## KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-ALDH1A3 antibody (Cat#AGI2441). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ALDH1A3 antibody (Cat#AGI2441, 1:500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-ALDH1A3 antibody (Cat#AGI2441). ALDH1A3 expression in wild-type (WT) and ALDH1A3 knockout (KO) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ALDH1A3 antibody (Cat#AGI2441,

1:1,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.