

KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody

Mouse monoclonal antibody

Catalog # AGI2442

Specification

KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Product Information

Application	WB
Primary Accession	P47895
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
Other Names	
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:27759097). High specificity for all-trans-retinal as substrate, can also accept acetaldehyde as substrate in vitro but with lower affinity (PubMed:27759097). 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

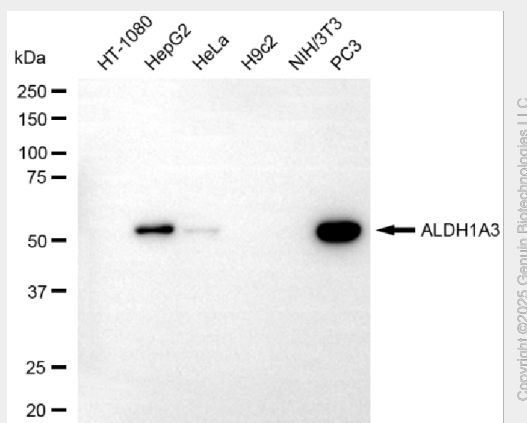
Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

KO-Validated Anti-ALDH1A3 Mouse Monoclonal Antibody - Protocols

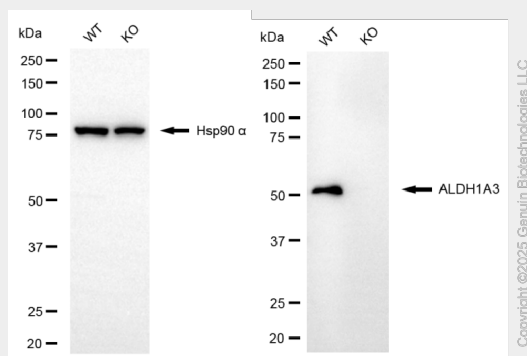
Provided below are standard protocols that you may find useful for product applications.

- [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#AGI2442). 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#AGI2442, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-ALDH1A3 antibody (Cat#AGI2442). 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#AGI2442,

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