

## OriGene Technologies, Inc.

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## **Product datasheet for TA501139**

## **ALDH3A1 Mouse Monoclonal Antibody [Clone ID: OTI1C6]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: OTI1C6

**Applications:** FC, IF, IHC, WB

**Recommend Dilution:** WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human ALDH3A1(NP\_000682) produced in

HEK293T cell.

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.96 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 50.2 kDa

**Gene Name:** aldehyde dehydrogenase 3 family member A1

Database Link: NP 000682 Entrez Gene 218 Human

**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. The enzyme encoded by this gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified.

Synonyms: ALDH3; ALDHIII

**Protein Families:** Druggable Genome

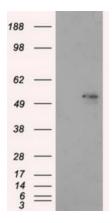




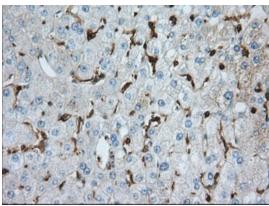
**Protein Pathways:** 

Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism

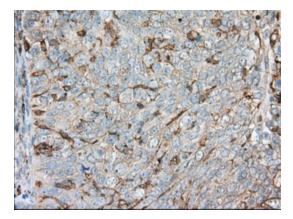
## **Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ALDH3A1 ([RC202440], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALDH3A1. Positive lysates [LY400232] (100ug) and [LC400232] (20ug) can be purchased separately from OriGene.

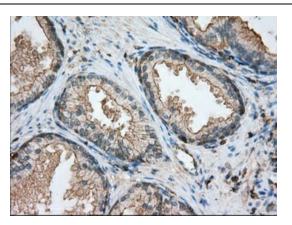


Immunohistochemical staining of paraffinembedded liver tissue within the normal limits using anti-ALDH3A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501139, Dilution 1:50)

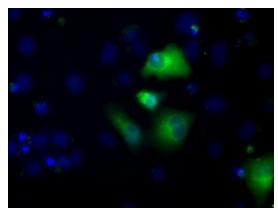


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary tissue using anti-ALDH3A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501139, Dilution 1:50)

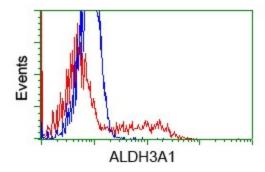




Immunohistochemical staining of paraffinembedded prostate tissue within the normal limits using anti-ALDH3A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501139, Dilution 1:50)



Anti-ALDH3A1 mouse monoclonal antibody (TA501139) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ALDH3A1 ([RC202440]).



HEK293T cells transfected with either pCMV6-ENTRY ALDH3A1 ([RC202440]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-ALDH3A1 mouse monoclonal (TA501139), and then analyzed by flow cytometry.