

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# **Product datasheet for TA501105**

# ALDH3A1 Mouse Monoclonal Antibody [Clone ID: OTI1B6]

### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	OTI1B6
Applications:	FC, IF, IHC, WB
<b>Recommend Dilution:</b>	WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100
Reactivity:	Human
Host:	Mouse
lsotype:	lgG2a
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:	0.93 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:	<u>NP_000682 Entrez Gene 218 Human</u>
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

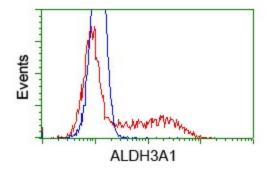


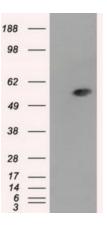
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2020 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

**Protein Pathways:** 

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

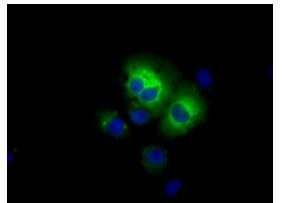
## **Product images:**



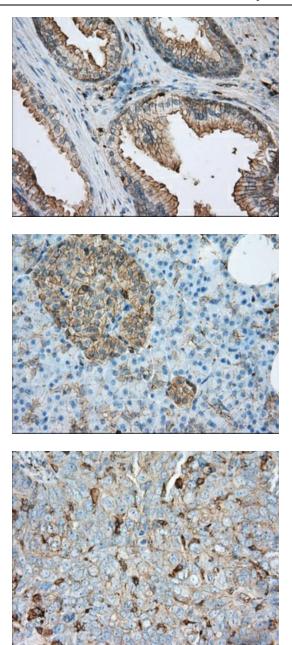


HEK293T cells transfected with either pCMV6-ENTRY ALDH3A1 ([RC202440]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-ALDH3A1 mouse monoclonal (TA501105), and then analyzed by flow cytometry.

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.



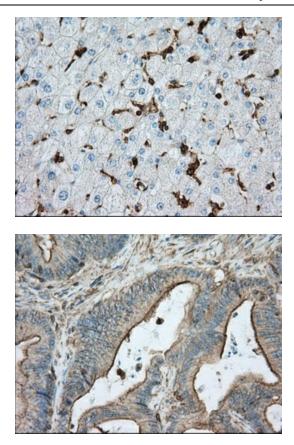
Anti-ALDH3A1 mouse monoclonal antibody (TA501105) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ALDH3A1 ([RC202440]).

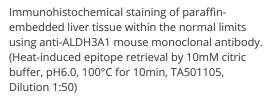
This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2020 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US 

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, TA501105, Dilution 1:50)

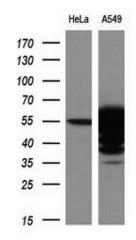
Immunohistochemical staining of paraffinembedded pancreas tissue within the normal limits using anti-ALDH3A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501105, Dilution 1:50)

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, TA501105, Dilution 1:50)

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2020 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US 



Immunohistochemical staining of paraffinembedded Adenocarcinoma of colon tissue using anti-ALDH3A1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA501105, Dilution 1:50)



Western blot analysis of extracts (10ug) from 2 different cell lines by using anti-ALDH3A1 monoclonal antibody at 1:200 dilution.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2020 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US