### For Research Use Only

# ALDH3A1 Monoclonal antibody

Catalog Number:68036-1-lg Featured Product

1 Publications



Protein G purification

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:1000-1:4000

IF/ICC 1:200-1:800

CloneNo.:

1D4G7

**Basic Information** 

**Applications** 

Catalog Number: 68036-1-lg Concentration: 1000 μg/ml

Source: Mouse Isotype: lgG1

Immunogen Catalog Number:

AG8125

**Tested Applications:** WB, IHC, IF/ICC, ELISA **Cited Applications:** 

Species Specificity:

Human **Cited Species:** 

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

GenBank Accession Number: **Purification Method:** 

BC004370 GeneID (NCBI):

**UNIPROT ID:** P30838

Full Name: aldehyde dehydrogenase 3 family,

memberA1 Calculated MW:

50 kDa Observed MW: 50 kDa

Positive Controls:

WB: A549 cells, LNCaP cells, HeLa cells

IHC: human kidney tissue, IF/ICC: HEK-293 cells,

# **Background Information**

 $ALDH3A1 (Aldehyde\ dehydrogenase,\ dimeric\ NADP-preferring),\ also\ named\ as\ ALDH3,\ is\ a\ member\ of\ the\ ALDH3,\ and\ an algorithms are also of\ all the algorithms are also of\ all the algorithms are also of\ all\ algorithms are also of\ algorithms are also of\$ superfamily, which consists of NAD(P)+-dependent enzymes that catalyse the oxidation of a wide variety of endogenously produced and exogenous aldehydes to their corresponding acids. It is expressed at high concentrations in the mammalian cornea and it is believed that it protects this vital tissue and the rest of the eye against UVlight-induced damage. (PMID:12943535). It can exsit as a dimer (PMID:16919242).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Mingshan Zhang	39865725	Adv Healthc Mater	IF

Storage

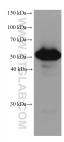
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

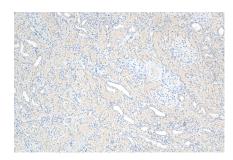
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

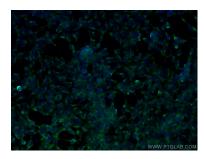
## **Selected Validation Data**



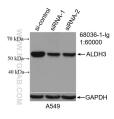
A549 cells were subjected to SDS PAGE followed by western blot with 68036-1-1g (ALDH3A1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



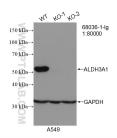
Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 68036-1-lg (ALDH3A1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using ALDH3A1 antibody (68036-1-lg, Clone: 1D4G7) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



WB result of ALDH3A1 antibody (68036-1-Ig; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ALDH3A1 transfected A549 cells.



WB result of ALDH3A1 antibody (68036-1-Ig; 1:80000; room temperature for 1.5 hours) with wild-type and ALDH3A1 knockout A549 cells.