

For Research Use Only

# ALDH3A1 Polyclonal antibody

Catalog Number: 15578-1-AP

Featured Product

27 Publications



## Basic Information

### Catalog Number:

15578-1-AP

### Concentration:

650 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7977

### GenBank Accession Number:

BC004370

### GeneID (NCBI):

218

### UNIPROT ID:

P30838

### Full Name:

aldehyde dehydrogenase 3 family, member A1

### Calculated MW:

50 kDa

### Observed MW:

50 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:20000-1:100000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:5000-1:20000

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, rabbit

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : A549 cells,

IP : A549 cells,

IHC : human skin cancer tissue,

IF/ICC : HEK-293T cells,

## Background Information

ALDH3A1 (Aldehyde dehydrogenase, dimeric NADP-prefering), also named as ALDH3, is a member of the ALDH 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 exist as a dimer(PMID:16919242).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jing Ma	25190659	Invest Ophthalmol Vis Sci	WB,IHC
Beau J Fenner	31632999	Eye Vis (Lond)	FC
Yu-Show Fu	35625862	Biomedicines	IHC

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

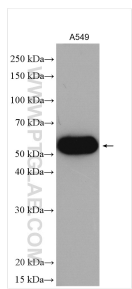
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

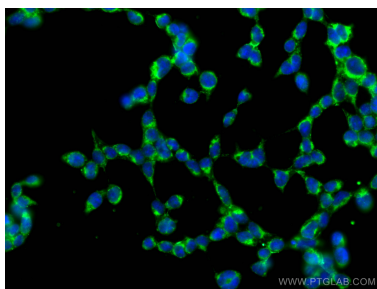
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

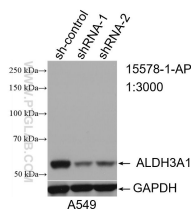
Selected Validation Data



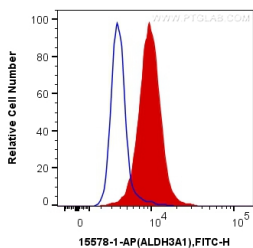
A549 cells were subjected to SDS PAGE followed by western blot with 15578-1-AP (ALDH3A1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



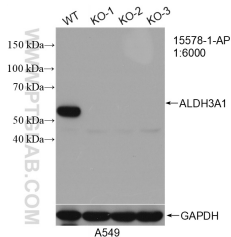
Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293T cells using ALDH3A1 antibody (15578-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



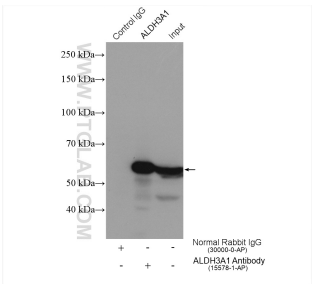
WB result of ALDH3A1 antibody (15578-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-ALDH3A1 transfected A549 cells.



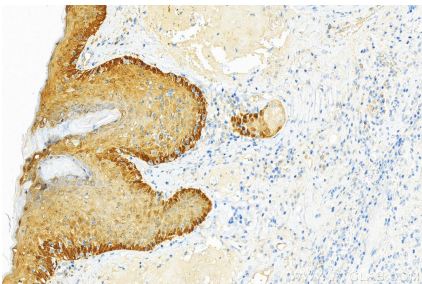
1X10<sup>6</sup> HEK-293 cells were intracellularly stained with 0.25 ug Anti-Human ALDH3A1 (15578-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.25 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



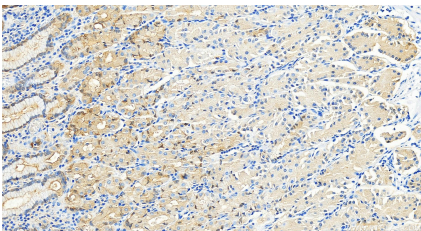
WB result of ALDH3A1 antibody (15578-1-AP; 1:6000; room temperature for 1.5 hours) with wild-type and ALDH3A1 knockout A549 cells.



IP result of anti-ALDH3A1 (IP:15578-1-AP, 4ug; Detection:15578-1-AP 1:3000) with A549 cells lysate 1480 ug.



Immunohistochemical analysis of paraffin-embedded skin cancer slide using 15578-1-AP (ALDH3A1 antibody) at dilution of 1:10000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 15578-1-AP (ALDH3A1 antibody) at dilution of 1:10000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).