

Product datasheet for **TA302024**

ALDH1A1 Rabbit Polyclonal Antibody

Product data:

| | |
|-------------------------|--|
| Product Type: | Primary Antibodies |
| Applications: | FC, IF, IHC, WB |
| Recommended Dilution: | WB: 1:1000, IHC: 1:10~50, IF: 1:10~50, FC: 1:10~50 |
| Reactivity: | Human (Predicted: Mouse, Monkey) |
| Host: | Rabbit |
| Isotype: | Ig |
| Clonality: | Polyclonal |
| Immunogen: | This ALDH1A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 302-331 amino acids from the Central region of human ALDH1A1. |
| Formulation: | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. |
| Concentration: | lot specific |
| Purification: | This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 54731 Da |
| Gene Name: | aldehyde dehydrogenase 1 family member A1 |
| Database Link: | NP_000680 Entrez Gene 11668 Mouse Entrez Gene 702598 Monkey Entrez Gene 216 Human P00352 |



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Background:

ALDH1A1 belongs to the aldehyde dehydrogenases family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of the mitochondrial isozyme.

Synonyms:

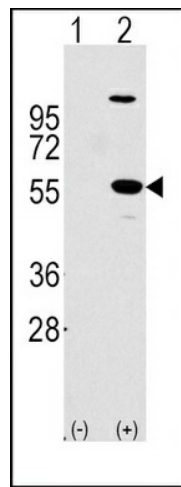
ALDC; ALDH-E1; ALDH1; ALDH11; HEL-9; HEL-S-53e; HEL12; PUMB1; RALDH1

Protein Families:

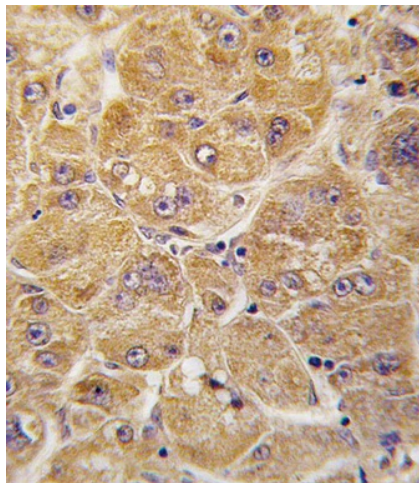
Druggable Genome, ES Cell Differentiation/IPS

Protein Pathways:

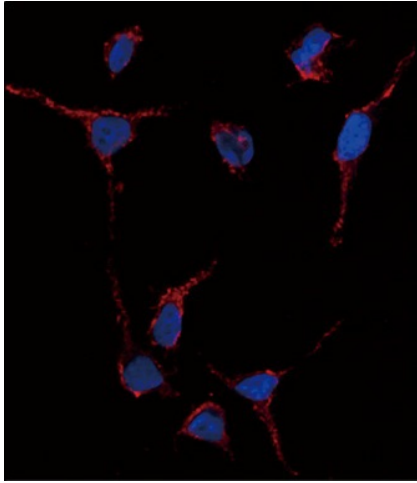
Metabolic pathways, Retinol metabolism

Product images:

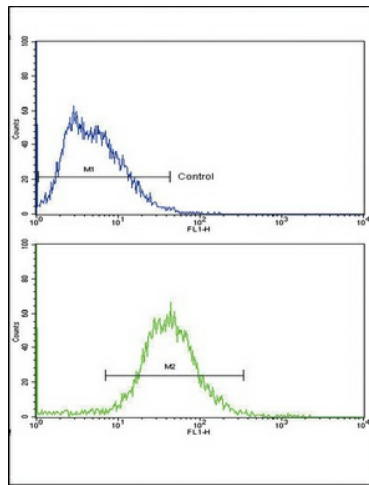
Western blot analysis of ALDH1A1 (arrow) using rabbit polyclonal ALDH1A1 Antibody (Center) (Cat# TA302024). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the ALDH1A1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with ALDH1A1 antibody (Center) (Cat.#TA302024), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Immunofluorescence analysis of anti-ALDH1A1 Antibody (Center) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



Flow cytometric analysis of HepG2 cells using ALDH1A1 Antibody (Center) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.