

**Catalog #: 61543** 

#### **Aliases**

ALDH1A1; Aldehyde Dehydrogenase 1 Family Member A1; RALDH1; ALDH1; PUMB1; 3-Deoxyglucosone Dehydrogenase; Retinaldehyde Dehydrogenase 1; Aldehyde Dehydrogenase 1A1;

Retinal Dehydrogenase 1; EC 1.2.1.36; ALDH-E1; RALDH 1; ALHDII; ALDC; Epididymis Secretory Sperm Binding Protein Li 53e; Aldehyde Dehydrogenase 1 Family, Member A1; Aldehyde Dehydrogenase Family 1 Member A1; Aldehyde Dehydrogenase, Liver Cytosolic; Aldehyde Dehydrogenase 1, Soluble; Aldehyde Dehydrogenase, Cytosolic; Epididymis Luminal Protein 12; Acetaldehyde Dehydrogenase 1; Epididymis Luminal Protein 9; ALDH Class 1; EC 1.2.1.19; EC 1.2.1.28; EC 1.2.1.3; HEL-S-53e; EC 1.2.1; ALDH11; RalDH1; HEL-9; HEL12

# **Background**

Gene Name: ALDH1A1 NCBI Gene Entry: 216 UniProt Entry: P00352

# **Application Information**

Molecular Weight: Predicted, 55 kDa; observed, 55 kDa

Clonality: Mouse monoclonal antibody

Clone ID: 25GB2755

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

## **Immunogen**

Recombinant protein of human ALDH1A1

### **Isotype**

Mouse IgG1

### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

### **Storage**

Store at -20 °C for one year.

### **Recommended Dilutions**

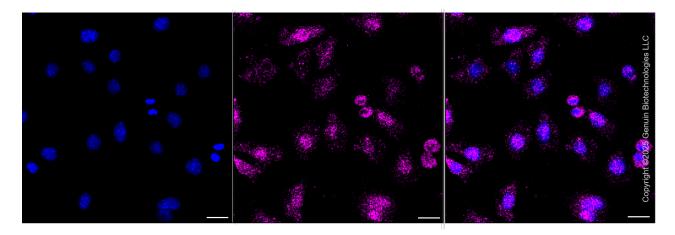
TEL: +1-540-855-7041

Western Blotting (WB): 1:400-1:2,000 Flow Cytometry (FCM): 1:2,000

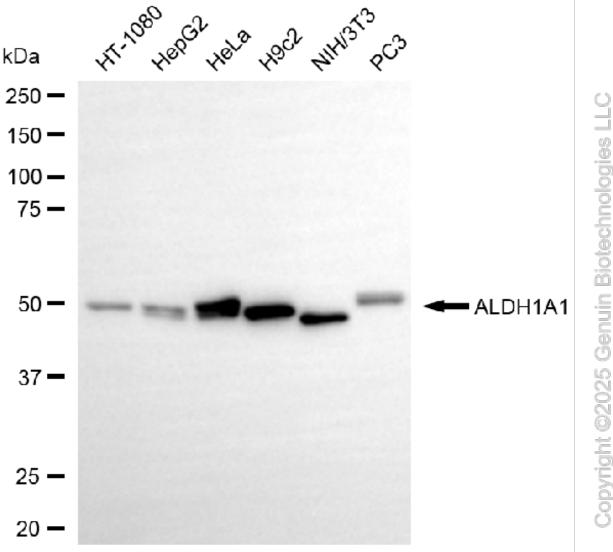
Immunocytochemistry (IC): 1:100-1:1,000

**Note:** This product is for research use only.

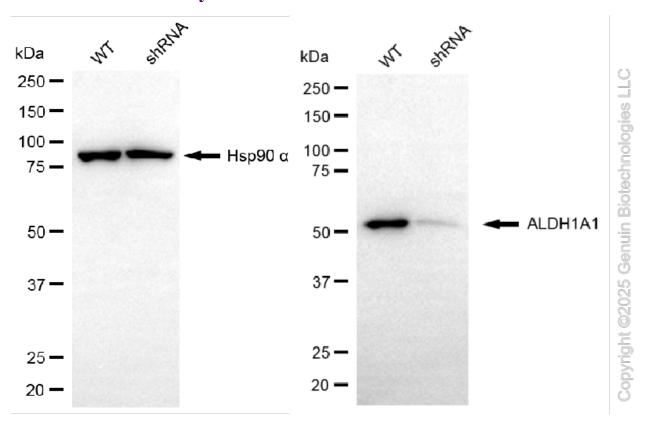
#### **Validation Data**



Immunocytochemical staining of C2C12 cells with anti-ALDH1A1 antibody (Cat#61543, 1:1,000). Nuclei were stained blue with DAPI; ALDH1A1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 μm.

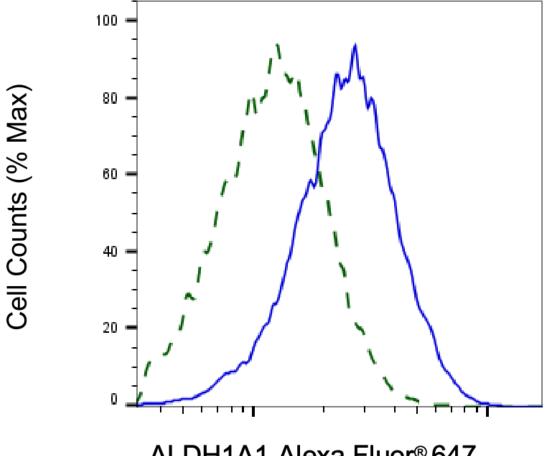


Western blotting analysis using anti-ALDH1A1 antibody (Cat#61543). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ALDH1A1 antibody (Cat#61543, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).



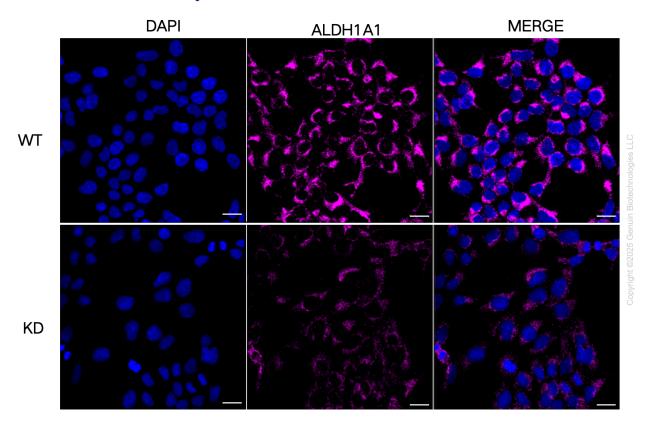
Western blotting analysis using anti-ALDH1A1 antibody (Cat#61543). ALDH1A1 expression in wild-type (WT) and ALDH1A1 shRNA knockdown (KD) HSHC cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-ALDH1A1 antibody (Cat#61543, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).





ALDH1A1-Alexa Fluor® 647

Validation of ALDH1A1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-ALDH1A1 antibody (Cat#61543, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using anti-ALDH1A1 antibody (Cat#61543, 1:1,000), Top panel: wild-type (WT); Bottom panal: ALDH1A1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; ALDH1A1 was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m.