

# CoraLite®594-conjugated ALDH1A1 Monoclonal antibody

Catalog Number: **CL594-60171**

## Basic Information

**Catalog Number:**

CL594-60171

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG8551

**GenBank Accession Number:**

BC001505

**GeneID (NCBI):**

216

**UNIPROT ID:**

P00352

**Full Name:**aldehyde dehydrogenase 1 family,  
member A1**Calculated MW:**

501 aa, 55 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

1A10A2

**Recommended Dilutions:**

IF/ICC 1:50-1:500

**Excitation/Emission maxima  
wavelengths:**

588 nm / 604 nm

## Applications

**Tested Applications:**

IF/ICC

**Species Specificity:**

human, mouse, rat, pig

**Positive Controls:**

IF/ICC : HeLa cells,

## Background Information

ALDH1A1 (Aldehyde dehydrogenase family 1 member A1), also named as ALDC, ALDH1 and PUMB1, belongs to the aldehyde dehydrogenase family. The ALDH1A1 gene encodes a liver cytosolic isoform of acetaldehyde dehydrogenase, an enzyme involved in the major pathway of alcohol metabolism after alcohol dehydrogenase. ALDH1A1 plays a critical role in protection against oxidative stress-induced cytotoxicity in lens epithelial cells (PMID:19296407). And it is important for multiple biological activities including drug resistance, cell differentiation, and oxidative stress response (PMID:19025616). As a novel cancer stem cell marker, ALDH1A1 can be used for tumors whose corresponding normal tissues express ALDH1A1 in relatively restricted or limited levels such as breast, lung, ovarian or colon cancer (PMID: 20422001). This antibody is CL594 (Ex/Em 593 nm/614 nm) conjugated.

## Storage

**Storage:**

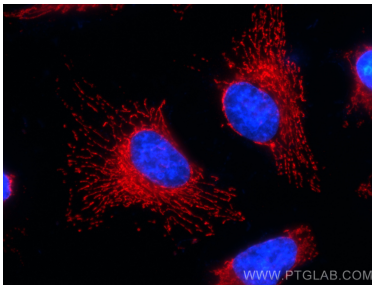
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

**Storage Buffer:**

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite®594 ALDH1A1 antibody (CL594-60171, Clone: 1A10A2 ) at dilution of 1:200.