

## ALDH1A1 Conjugated Antibody

Catalog No: #C32441



Package Size: #C32441-AF350 100ul #C32441-AF405 100ul #C32441-AF488 100ul  
 #C32441-AF555 100ul #C32441-AF594 100ul #C32441-AF647 100ul  
 #C32441-AF680 100ul #C32441-AF750 100ul #C32441-Biotin 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
 Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

## Description

Product Name	ALDH1A1 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total ALDH1A1 protein.
Immunogen Description	Recombinant protein of human ALDH1A1.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	ALDC;ALDH-E1;ALDH1;ALDH11;MGC2318
Accession No.	Swiss-Prot#:P00352NCBI Gene ID:216
Uniprot	P00352
GeneID	216;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	55
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Product Description

---

Antibodies were purified by affinity purification using immunogen.

## Background

---

The aldehyde dehydrogenase family is a large group of enzymes that oxidize aldehydes formed through metabolic processes to their carboxylic acids (1). ALDH1A1 is a liver cytosolic isoform of acetaldehyde dehydrogenase and is involved in the major pathway of alcohol metabolism along with alcohol dehydrogenase (2). ALDH1A1 is also known as retinal dehydrogenase 1 and is involved in retinol metabolism, converting retinol to retinoic acid (3). Recent studies suggest that control of retinoid signaling through ALDH1A1 may influence hematopoietic stem cell differentiation (4). There has been recent interest in ALDH1 isoforms as predictive biomarkers in disease. Several studies have suggested that ALDH1A1 is a potential marker for cancer stem cells and chemoresistance in several tumor types, such as melanoma (5), lung cancer (6), glioblastoma (7).

---

Note: This product is for in vitro research use only