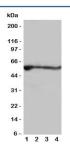


# ALDH2 Antibody (R31184)

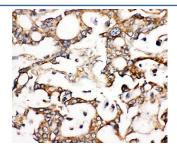
Catalog No.	Formulation	Size
R31184	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

# **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P05091
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This ALDH2 antibody is available for research use only.



Western blot testing of ALDH2 antibody and rat samples; Lane 1: liver; 2: intestine; 3: lung; 4: kidney tissue lysate. Predicted molecular weight:  $\sim$ 56kDa.



IHC-P: ALDH2 antibody testing of human liver cancer tissue

## **Description**

Aldehyde Dehydrogenase 2 is a human gene. The enzyme encoded by this gene belongs to the ALDH family of enzymes that catalyze the chemical transformation from acetaldehyde to acetic acid. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Hsu et al.(1985) assigned the ALDH2 locus to chromosome 12 by means of a cDNA probe and Southern blot analysis of somatic cell hybrids. Using an unbiased proteomic search, Chen et al.(2008) identified mitochondrial ALDH2 as an enzyme whose activation correlated with reduced ischemic heart damage in rodent models. A high-throughput screen identified a small molecule activator of ALDH2, which they called Alda-1, that, when administered to rats before an ischemic event, reduced infarct size by 60%, most likely through its inhibitory effect on the formation of cytotoxic aldehydes.

## **Application Notes**

The stated application concentrations are suggested starting amounts. Titration of the ALDH2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

#### **Immunogen**

An amino acid sequence from the N-terminus of human Aldehyde Dehydrogenase 2 (SAAATQAVPAPNQQPE) was used as the immunogen for this ALDH2 antibody.

#### **Storage**

After reconstitution, the ALDH2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.