

Basic Information

Product Name	Anti-ALDH3A1 Antibody	
Gene Name	ALDH3A1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ALDH3A1, identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	55 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-400	

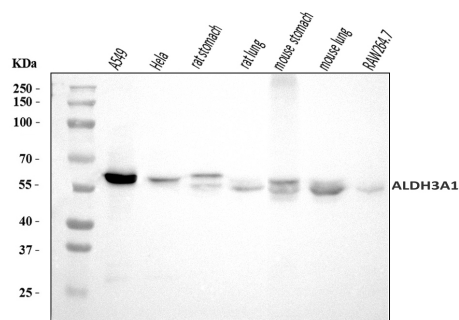
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

ALDH3A1(Aldehyde Dehydrogenase, Family 3, Subfamily A, Member 1), also known as ALDH3, is an enzyme that in humans is encoded by the ALDH3A1 gene. By in situ hybridization, Hiraoka et al.(1995) mapped the ALDH3 gene to 17p11.2. ALDHs play a major role in the detoxification of alcohol-derived acetaldehyde. They are involved in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. This protein preferentially oxidizes aromatic aldehyde substrates. It may play a role in the oxidation of toxic aldehydes.

Selected Validation Data



Western blot analysis of ALDH3A1 using anti-ALDH3A1 antibody

(A01121-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: A549 whole cell lysates,

Lane 2: Hela whole cell lysates,

Lane 3: rat stomach tissue lysates,

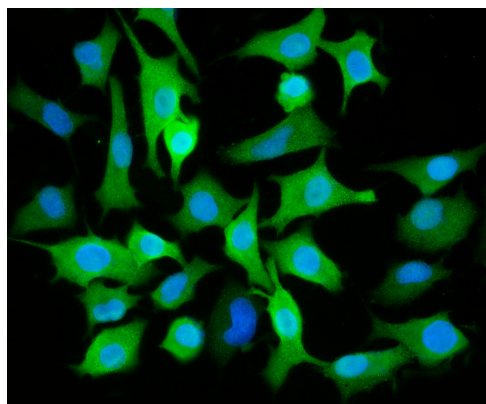
Lane 4: rat lung tissue lysates,

Lane 5: mouse stomach tissue lysates,

Lane 6: mouse lung tissue lysates,

Lane 7: RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ALDH3A1 antigen affinity purified polyclonal antibody (A01121-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ALDH3A1 at approximately 55 kDa. The expected band size for ALDH3A1 is at 50 kDa.



IF analysis of ALDH3A1 using anti-ALDH3A1 antibody (A01121-3).

ALDH3A1 was detected in an immunocytochemical section of A549 cells.

The section was incubated with rabbit anti-ALDH3A1 Antibody (A01121-3) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).