

Basic Information

Product Name	Anti-ALDH1A3 Antibody	
Gene Name	ALDH1A3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human ALDH1A3 recombinant protein (Position: N37-K154). Human ALDH1A3 shares 89% and 87.3% amino acid (aa) sequence identity with mouse and rat ALDH1A3, respectively.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	56 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

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

Background Information

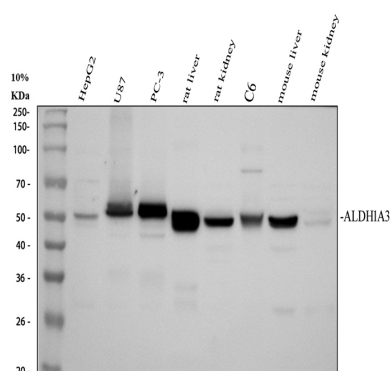
Aldehyde dehydrogenase 1 family, member A3, also known as ALDH1A3 or retinaldehyde dehydrogenase 3 (RALDH3), is an enzyme that in humans is encoded by the ALDH1A3 gene. Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The enzyme encoded by this gene uses retinal as a substrate, either in a free or a cellular retinol-binding protein form. Mutations in this gene have been associated with microphthalmia, isolated 8, and expression changes have also been detected in

tumor cells. Alternative splicing results in multiple transcript variants.

Reference

Anti-ALDH1A3 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of ALDH1A3 using anti-ALDH1A3 antibody (A03030). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human U87 whole cell lysates,

Lane 3: human PC-3 whole cell lysates,

Lane 4: rat liver tissue lysates,

Lane 5: rat kidney tissue lysates,

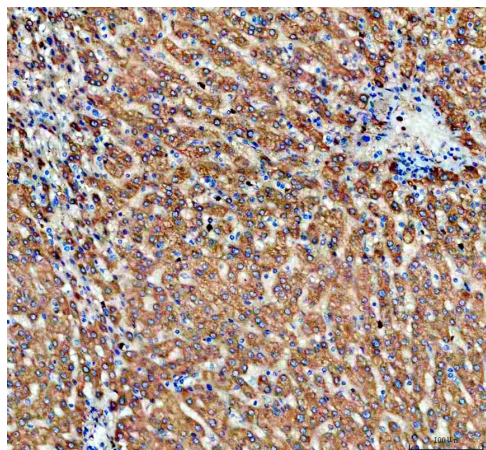
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse liver tissue lysates,

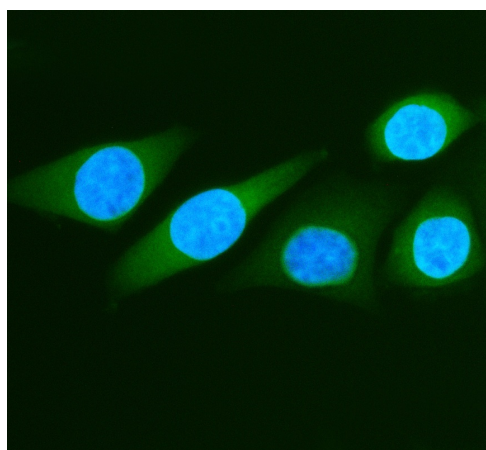
Lane 8: mouse kidney tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

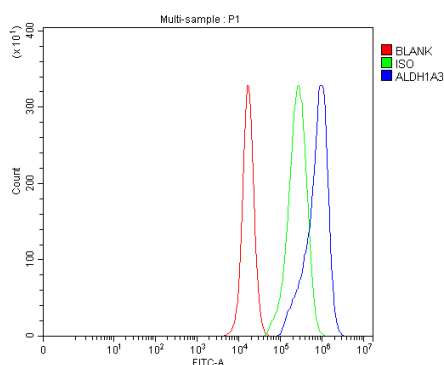
Then the membrane was incubated with rabbit anti-ALDH1A3 antigen affinity purified polyclonal antibody (A03030) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ALDH1A3 at approximately 50-56 kDa. The expected band size for ALDH1A3 is at 56 kDa.



IHC analysis of ALDH1A3 using anti-ALDH1A3 antibody (A03030). ALDH1A3 was detected in a paraffin-embedded section of human prostate cancer tissue. The tissue section was incubated with rabbit anti-ALDH1A3 Antibody (A03030) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ALDH1A3 using anti-ALDH1A3 antibody (A03030). ALDH1A3 was detected in an immunocytochemical section of SiHa cells. The section was incubated with rabbit anti-ALDH1A3 Antibody (A03030) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of PC-3 cells using anti-ALDH1A3 antibody (A03030).

Overlay histogram showing PC-3 cells stained with A03030 (Blue line). To facilitate intrMyelin basic protein/MBPIllular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ALDH1A3 Antibody (A03030) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Product datasheet

Anti-ALDH1A3 Antibody

Catalog Number: **A03030**



antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY

Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.

Web: www.boster.com **Phone:** 027-67845390/1/2 **Email:** boster@boster.com