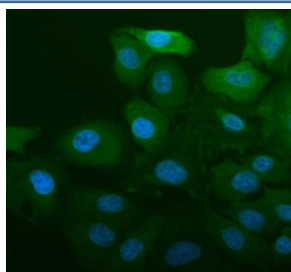


ALDH1A1 Antibody / Acetaldehyde dehydrogenase 1 (R30756)

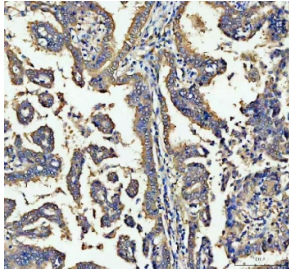
Catalog No.	Formulation	Size
R30756	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

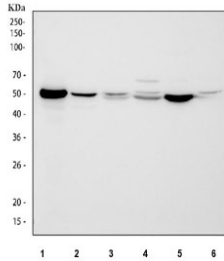
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P00352
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This ALDH1A1 antibody is available for research use only.



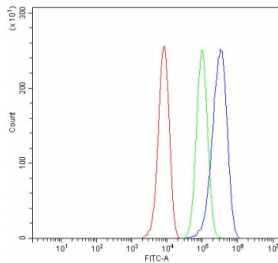
Immunofluorescent staining of FFPE human A549 cells with ALDH1A1 antibody (blue) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE human lung cancer tissue with ALDH1A1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human A549, 2) human HepG2, 3) rat liver, 4) rat kidney, 5) mouse liver and 6) mouse kidney tissue lysate with ALDH1A1 antibody. Expected molecular weight ~55 kDa.



Flow cytometry testing of fixed and permeabilized human HepG2 cells with ALDH1A1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ALDH1A1 antibody.

Description

Aldehyde dehydrogenase 1 family, member A1, also called ALDH1, RALDH1 or ALDH, is an enzyme that in humans is encoded by the ALDH1A1 gene. And this protein belongs to the aldehyde dehydrogenases family of proteins. The gene is mapped on 9q21.13. ALDH1A1 also belongs to the group of corneal crystallins that help maintain the transparency of the cornea. It is associated with a low K_m for NAD, a high K_m for acetaldehyde, and is strongly inactivated by disulfiram. Retinaldehyde is generated by ADH1 from retinol, and its concentration is determined in large part by its subsequent catabolism by ALDH1A1 to retinoic acid.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the ALDH1A1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 283-303 (DLDNAVEFAHHGVFYHQGCC-human) were used as the immunogen for this ALDH1A1 antibody.

Storage

After reconstitution, the ALDH1A1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

