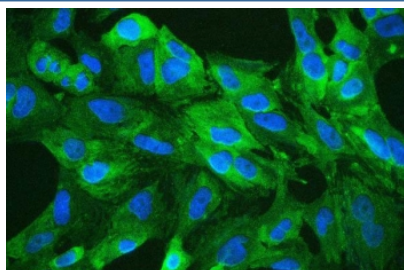


ALDH1A1 Antibody (RQ5510)

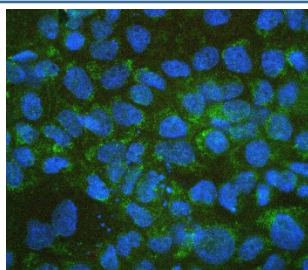
Catalog No.	Formulation	Size
RQ5510	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

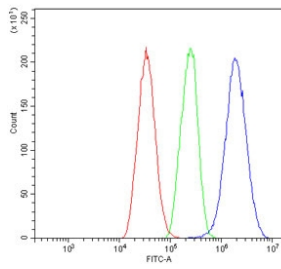
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P00352
Applications	Western Blot : 0.25-0.5ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This ALDH1A1 antibody is available for research use only.



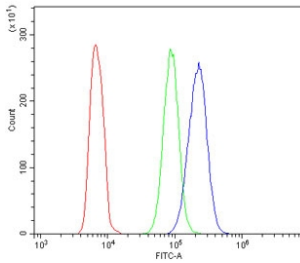
Immunofluorescent staining of FFPE human A549 with ALDH1A1 antibody (green) and DAPI (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



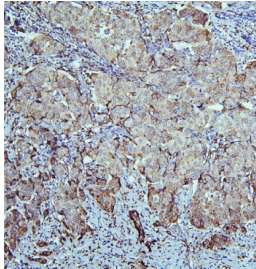
Immunofluorescent staining of FFPE human A431 with ALDH1A1 antibody (green) and DAPI (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



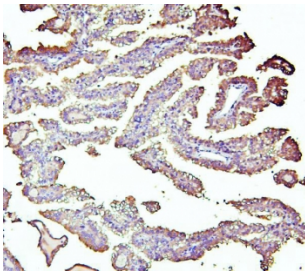
Flow cytometry testing of human HepG2 cells with ALDH1A1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ALDH1A1 antibody.



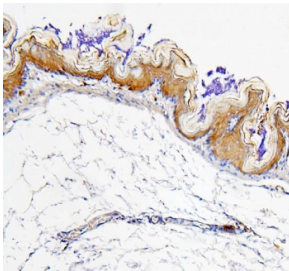
Flow cytometry testing of human HL60 cells with ALDH1A1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ALDH1A1 antibody.



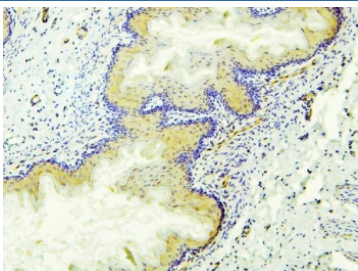
IHC staining of FFPE human breast cancer with ALDH1A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



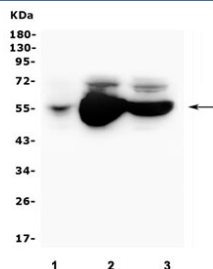
IHC staining of FFPE human renal cancer with ALDH1A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



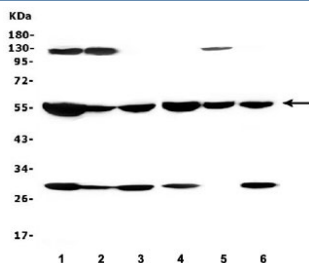
IHC staining of FFPE mouse stomach with ALDH1A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



IHC staining of FFPE rat stomach with ALDH1A1 antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 20 min and allow to cool before testing.



Western blot testing of human 1) placenta, 2) A549 and 3) HepG2 lysate with ALDH1A1 antibody. Expected molecular weight ~55 kDa.



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

Description

Aldehyde dehydrogenase 1 family, member A1, also known as ALDH1A1 or retinaldehyde dehydrogenase 1 (RALDH1), is an enzyme that in humans is encoded by the ALDH1A1 gene. It is mapped to 9q21.13. The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene encodes the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, this gene may also be involved in the regulation of the metabolic responses to high-fat diet.

Application Notes

Optimal dilution of the ALDH1A1 antibody should be determined by the researcher.

Immunogen

A human recombinant protein (amino acids T6-Q342) was used as the immunogen for the 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.