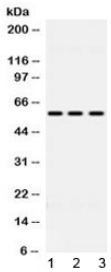
ALDH7A1 Antibody / Aldehyde dehydrogenase 7A1 (R32506)

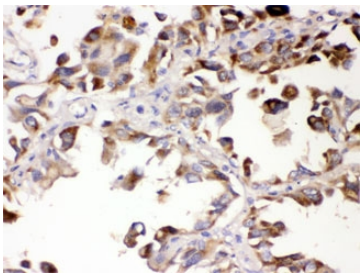
Catalog No.	Formulation	Size
R32506	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

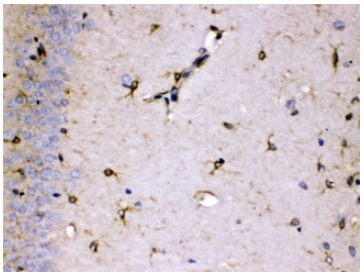
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P49419
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Immunofluorescenc/Immunocytochemistry (FFPE): 2-4ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This ALDH7A1 antibody is available for research use only.



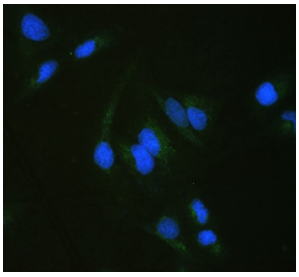
Western blot testing of 1) rat liver, 2) mouse HEPA and 3) human HeLa lysate with ALDH7A1 antibody at 0.5ug/ml. Predicted molecular weight ~58 kDa.



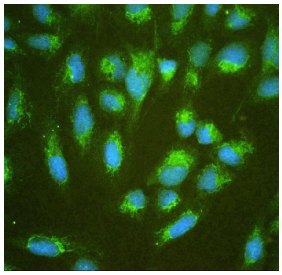
IHC testing of FFPE human lung with ALDH7A1 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer for 20 min.



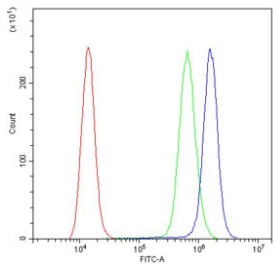
IHC testing of FFPE rat brain with ALDH7A1 antibody at 1ug/ml. HIER: steam sections in pH6 citrate buffer for 20 min.



IF/ICC staining of FFPE human U-2 OS cells with ALDH7A1 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IF/ICC staining of FFPE human U-2 OS cells with ALDH7A1 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of permeabilized human A431 cells with ALDH7A1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ALDH7A1 antibody.

Description

Aldehyde dehydrogenase 7 family, member A1, also known as ALDH7A1 or antiquitin, is an enzyme that in humans is encoded by the ALDH7A1 gene. The protein encoded by this gene is a member of subfamily 7 in the aldehyde dehydrogenase gene family. These enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism andlipid peroxidation. This particular member has homology to a previously described protein from the green garden pea, the 26g pea turgor protein. It is also involved in lysine catabolism that is known to occur in the mitochondrial matrix. Recent reports show that this protein is found both in the cytosol and the mitochondria, and the two forms likely arise from the use of alternative translation initiation sites. An additional variant encoding a different isoform has also been found for this gene. Mutations in this gene are associated with pyridoxine-dependent epilepsy. Several

related pseudogenes have also been identified.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the ALDH7A1 antibody to be titrated for optimal performance.

Immunogen

Amino acids 333-369 (ARRLFIHESIHDEVVNRLKKAYAQIRVGNPWDPNVLY) from the human protein were used as the immunogen for the ALDH7A1 antibody.

Storage

After reconstitution, the ALDH7A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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