ARG59775
anti-ALDH4A1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ALDH4A1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ALDH4A1
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 354-563 of Human ALDH4A1 (NP_003739.2).
Conjugation	Un-conjugated
Alternate Names	P5CD; ALDH4; P5CDh; Aldehyde dehydrogenase family 4 member A1; L-glutamate gamma-semialdehyde dehydrogenase; Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial; P5C dehydrogenase; EC 1.2.1.88

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Mouse skeletal muscle and BT474
Observed Size	65 kDa

Properties

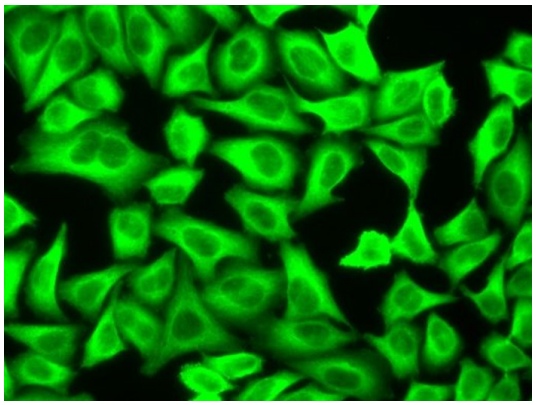
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

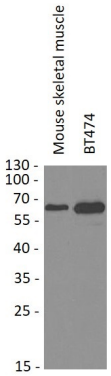
Gene Symbol	ALDH4A1
Gene Full Name	aldehyde dehydrogenase 4 family, member A1
Background	This protein belongs to the aldehyde dehydrogenase family of proteins. This enzyme is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Deficiency of this enzyme is associated with type II hyperprolinemia, an autosomal recessive disorder characterized by accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2009]
Function	Irreversible conversion of delta-1-pyrroline-5-carboxylate (P5C), derived either from proline or ornithine, to glutamate. This is a necessary step in the pathway interconnecting the urea and tricarboxylic acid cycles. The preferred substrate is glutamic gamma-semialdehyde, other substrates include succinic, glutaric and adipic semialdehydes. [UniProt]
Calculated Mw	62 kDa
Cellular Localization	Mitochondrion matrix. [UniProt]

Images



ARG59775 anti-ALDH4A1 antibody ICC/IF image

Immunofluorescence: A549 cells stained with ARG59775 anti-ALDH4A1 antibody.



ARG59775 anti-ALDH4A1 antibody WB image

Western blot: 25 µg of Mouse skeletal muscle and BT474 cell lysates stained with ARG59775 anti-ALDH4A1 antibody at 1:1000 dilution.