

Product Name: KD-Validated ALDH4A1 Mouse Monoclonal Antibody**Catalog #: KVA01704**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:2,500
Molecular Weight	Calculated MW: 61.7kDa

Antigen Information

Gene Name	ALDH4A1
Alternative Names	ALDH4A1; Aldehyde Dehydrogenase 4 Family Member A1; L-Glutamate Gamma-Semialdehyde Dehydrogenase; P5CDH; ALDH4; Delta-1-Pyrroline-5-Carboxylate Dehydrogenase, Mitochondrial; Aldehyde Dehydrogenase Family 4 Member A1; P5C Dehydrogenase; Mitochondrial Delta-1-Pyrroline 5-Carboxylate Dehydrogenase; Delta-1-Pyrroline-5-Carboxylate Dehydrogenase; Aldehyde Dehydrogenase 4 Family, Member A1; Epididymis Secretory Sperm Binding Protein; EC 1.2.1.88; EC 1.5.1.12; P5CDH; P5CD
Gene ID	8659.0
SwissProt ID	P30038
Immunogen	Recombinant protein of human ALDH4A1

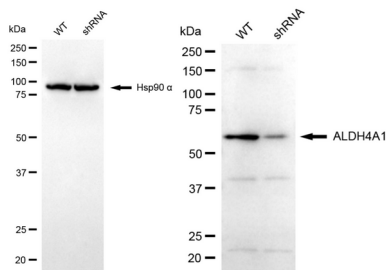
Background

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]

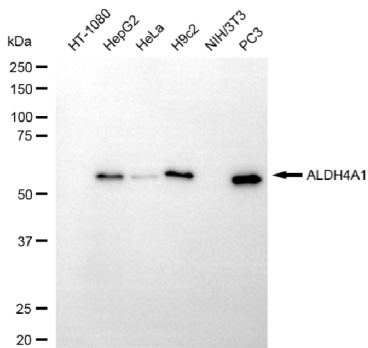
Research Area

Tags & Cell Markers, Signal Transduction, Metabolism

Image Data



Western blotting analysis using ALDH4A1 antibody (KVA01704). ALDH4A1 expression in wild-type (WT) and ALDH4A1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ALDH4A1 antibody (KVA01704, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using ALDH4A1 antibody (KVA01704). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ALDH4A1 antibody (KVA01704, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.