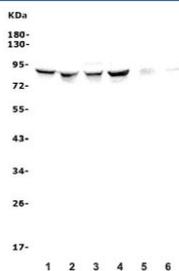


## ALDH18A1 Antibody / P5CS (RQ6036)

Catalog No.	Formulation	Size
RQ6036	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
<b>UniProt</b>	P54886
<b>Applications</b>	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	This ALDH18A1 antibody is available for research use only.



Western blot testing of human 1) HeLa, 2) MDA-MB-453, 3) Caco-2, 4) HEK293, 5) rat heart and 6) mouse skeletal muscle lysate with ALDH18A1 antibody. Predicted molecular weight: 85 kDa.

### Description

Delta-1-pyrroline-5-carboxylate synthetase (P5CS) is an enzyme that in humans is encoded by the ALDH18A1 gene. This gene is mapped to 10q24.1. This gene is a member of the aldehyde dehydrogenase family and encodes a bifunctional ATP- and NADPH-dependent mitochondrial enzyme with both gamma-glutamyl kinase and gamma-glutamyl phosphate reductase activities. The encoded protein catalyzes the reduction of glutamate to delta1-pyrroline-5-carboxylate, a critical step in the de novo biosynthesis of proline, ornithine and arginine. Mutations in this gene lead to hyperammonemia, hypoorithinemia, hypocitrullinemia, hypoargininemia and hypoprolinemia and may be associated with

neurodegeneration, cataracts and connective tissue diseases. Alternatively spliced transcript variants, encoding different isoforms, have been described for this gene.

## **Application Notes**

Optimal dilution of the ALDH18A1 antibody should be determined by the researcher.

## **Immunogen**

Recombinant human protein (amino acids M1-A224) was used as the immunogen for the ALDH18A1 antibody.

## **Storage**

After reconstitution, the ALDH18A1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.