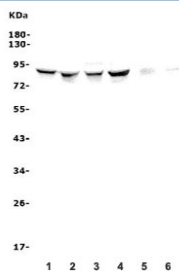


ALDH18A1 Antibody / P5CS (RQ6036)

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

Bulk quote request

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	P54886
Applications	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	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.