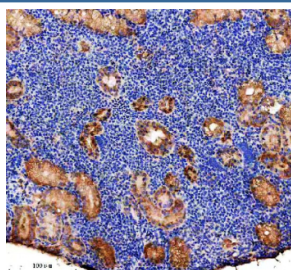


## Zebrafish Aldh18a1 Antibody / Glutamate 5-kinase / P5cs (RZ1101)

Catalog No.	Formulation	Size
RZ1101	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	2-3 weeks
<b>Species Reactivity</b>	Zebrafish
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Antigen affinity chromatography
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	A4IGC8
<b>Applications</b>	Immunohistochemistry (FFPE) : 2-5 ug/ml
<b>Limitations</b>	This Zebrafish Aldh18a1 antibody is available for research use only.



Immunohistochemical analysis of P5CS/ALDH18A1 protein using Zebrafish Aldh18a1 antibody and paraffin-embedded zebrafish kidney tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## 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 Zebrafish Aldh18a1 antibody should be determined by the researcher.

## Immunogen

An E.coli-derived zebrafish P5CS/ALDH18A1 recombinant protein (amino acids R35-A204) was used as the immunogen for the Zebrafish Aldh18a1 antibody.

## Storage

After reconstitution, the Zebrafish 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.