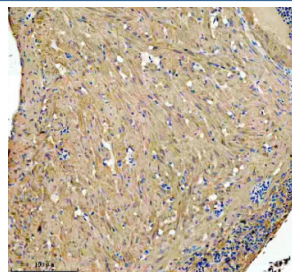


Zebrafish Glud1 Antibody / Glud1a / Glud1b / Glutamate dehydrogenase (RZ1158)

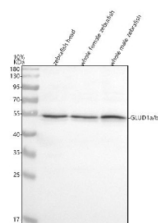
Catalog No.	Formulation	Size
RZ1158	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

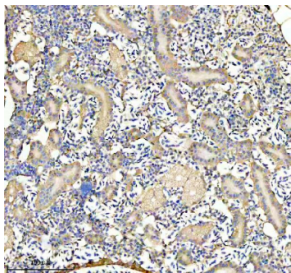
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q6NZ29
Localization	Cytoplasm (Mitochondria)
Applications	Western Blot : 0.5-1 ug/ml Immunohistochemistry (FFPE) : 2-5 ug/ml
Limitations	This Zebrafish Glud1 antibody is available for research use only.



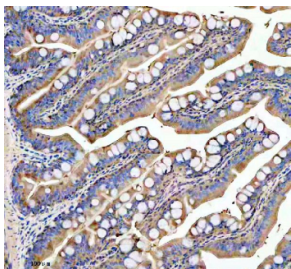
IHC staining of FFPE zebrafish brain tissue with Zebrafish Glud1 antibody, HRP secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Glud1a/b protein using Zebrafish Glud1 antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight ~60 kDa.



IHC staining of FFPE zebrafish kidney tissue with Zebrafish Glud1 antibody, HRP secondary and DAB substrate. HIHER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE zebrafish colon tissue with Zebrafish Glud1 antibody, HRP secondary and DAB substrate. HIHER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

This gene encodes Glutamate dehydrogenase, which is a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid-induced insulin secretion. It is allosterically activated by ADP and inhibited by GTP and ATP. Activating mutations in this gene are a common cause of congenital hyperinsulinism. Alternative splicing of this gene results in multiple transcript variants. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Related pseudogenes have been identified on chromosomes 10, 18 and X.

Application Notes

Optimal dilution of the Zebrafish Glud1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Glud1a/b recombinant protein (amino acids S40-A539) was used as the immunogen for the Zebrafish Glud1 antibody. This antibody will detect the a and b isoforms.

Storage

After reconstitution, the Zebrafish Glud1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.