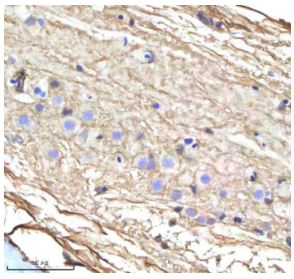
Zebrafish Cyp17a1 Antibody (RZ1214)

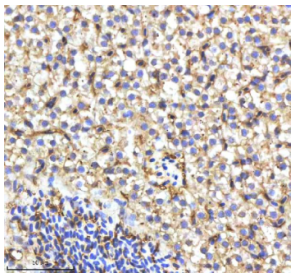
Catalog No.	Formulation	Size
RZ1214	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	B3DH80
Localization	Membrane
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Cyp17a1 antibody is available for research use only.



IHC staining of zebrafish Cyp17a1 protein using Zebrafish Cyp17a1 antibody, HRP-labeled secondary and DAB substrate. Cyp17a1 was detected in a paraffin-embedded section of zebrafish spinal cord tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Cyp17a1 protein using Zebrafish Cyp17a1 antibody, HRP-labeled secondary and DAB substrate. Cyp17a1 was detected in a paraffin-embedded section of zebrafish liver tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Cyp17a1, or cytochrome P four five zero family seventeen subfamily A polypeptide one, is a critical enzyme involved in the biosynthesis of steroid hormones. In zebrafish, Cyp17a1 performs both seventeen alpha hydroxylase and seventeen twenty lyase activities, enabling the production of key intermediates for the synthesis of glucocorticoids and sex steroids.

Cyp17a1 is predominantly expressed in steroidogenic tissues such as the interrenal gland, gonads, and brain. During development, it is required for the proper formation of the endocrine system and plays a vital role in processes such as stress regulation, sexual differentiation, and reproduction. By controlling the production of hormones like cortisol, testosterone, and estradiol, Cyp17a1 supports a wide range of physiological functions including metabolism, immune regulation, and fertility.

Because of its conserved enzymatic role and tissue-specific expression, zebrafish Cyp17a1 is frequently used as a model to study endocrine system development, steroid hormone biosynthesis, and the impact of environmental or pharmaceutical compounds on hormone production. It is also valuable for research into adrenal and gonadal disorders.

Application Notes

Optimal dilution of the Zebrafish Cyp17a1 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Cyp17a1 recombinant protein (amino acids Q67-C519) was used as the immunogen for the Zebrafish Cyp17a1 antibody.

Storage

After reconstitution, the Zebrafish Cyp17a1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.