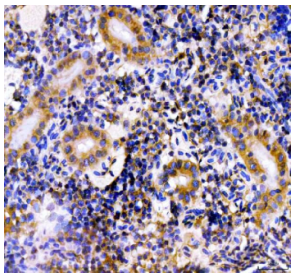
Zebrafish Hsd3b1 Antibody (RZ1198)

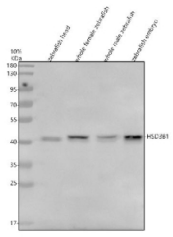
Catalog No.	Formulation	Size
RZ1198	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

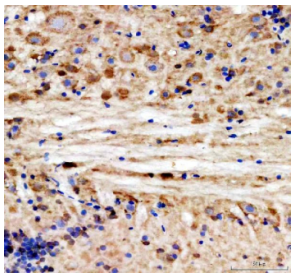
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	F1QSA2
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Hsd3b1 antibody is available for research use only.



IHC staining of FFPE zebrafish kidney tissue with Zebrafish Hsd3b1 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Hsd3b1 protein using Zebrafish Hsd3b1 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~42 kDa.



IHC staining of FFPE zebrafish brain tissue with Zebrafish Hsd3b1 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

3-beta-hydroxysteroid dehydrogenase type 1 (Hsd3b1) is a key enzyme in the biosynthesis of steroid hormones, catalyzing the conversion of delta-5-3-beta-hydroxysteroids to delta-4-ketosteroids. In zebrafish (Danio rerio), Hsd3b1 plays a crucial role in the production of glucocorticoids, mineralocorticoids, androgens, and estrogens, and is essential for proper steroidogenic tissue function, including that of the gonads and interrenal gland (the fish analog of the adrenal cortex).

Zebrafish hsd3b1 is expressed in steroidogenic tissues during development and in adult stages, where it supports endocrine functions related to stress response, reproduction, and growth. The enzyme is highly conserved across vertebrates, making zebrafish a valuable model for studying steroid biosynthesis, hormonal regulation, and the effects of endocrine-disrupting chemicals (EDCs).

Because of its involvement in hormone production and its responsiveness to physiological and environmental signals, zebrafish Hsd3b1 is widely used in research on developmental endocrinology, reproductive biology, and toxicology.

Application Notes

Optimal dilution of the Zebrafish Hsd3b1 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Hsd3b1 recombinant protein (amino acids F16-K374) was used as the immunogen for the Zebrafish Hsd3b1 antibody.

Storage

After reconstitution, the Zebrafish Hsd3b1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.