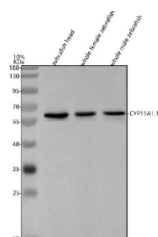


Zebrafish Cyp11a1.1 Antibody / Cyp11a1 (RZ1213)

Catalog No.	Formulation	Size
RZ1213	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	Q7SYJ6
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Cyp11a1.1 antibody is available for research use only.



Western blot analysis of Cyp11a1.1 protein using Zebrafish Cyp11a1.1 antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight ~59 kDa.

Description

Cyp11a1.1, or cytochrome P four five zero family eleven subfamily A polypeptide one point one, is an essential enzyme involved in the first and rate-limiting step of steroid hormone biosynthesis. In zebrafish, Cyp11a1.1 catalyzes the conversion of cholesterol to pregnenolone, a precursor for all classes of steroid hormones including glucocorticoids, mineralocorticoids, and sex steroids.

Cyp11a1.1 is primarily expressed in steroidogenic tissues such as the interrenal gland, which is the functional equivalent of the adrenal gland in mammals, as well as in the gonads and brain. Its expression begins early in development and is tightly regulated by hormonal signals and developmental cues. Proper function of Cyp11a1.1 is essential for regulating

processes such as stress response, growth, metabolism, and reproductive development.

Zebrafish Cyp11a1.1 is highly conserved and widely used in studies of endocrine system development, steroid biosynthesis, and hormone-related disorders. It is also a valuable model for understanding the molecular effects of endocrine-disrupting chemicals and for screening compounds that target steroidogenic pathways.

Application Notes

Optimal dilution of the Zebrafish Cyp11a1.1 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Cyp11a1.1 recombinant protein (amino acids K96-K487) was used as the immunogen for the Zebrafish Cyp11a1.1 antibody.

Storage

After reconstitution, the Zebrafish Cyp11a1.1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.