

Anti-Zebrafish DIO3A Antibody

Catalog Number: AZA0A8M1P485

About DIO3A

The protein encoded by this gene belongs to the iodothyronine deiodinase family. It catalyzes the inactivation of thyroid hormone by inner ring deiodination of the prohormone thyroxine (T4) and the bioactive hormone 3,3',5-triiodothyronine (T3) to inactive metabolites, 3,3',5'-triiodothyronine (RT3) and 3,3'-diiodothyronine (T2), respectively. Two paralogs of this gene have been identified in zebrafish on chromosomes 17 and 20. Both encode enzymatically active proteins; however, their gene structure and tissue expression patterns are markedly different. This gene is intronless, like orthologs in all other vertebrate species studied to date, but unlike the paralog on chromosome 20, which is 2-exon. Knockdown of this gene indicates that it is essential for normal zebrafish embryonic and early larval development. This protein is a selenoprotein, containing the rare selenocysteine (Sec) amino acid at its active site. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal.

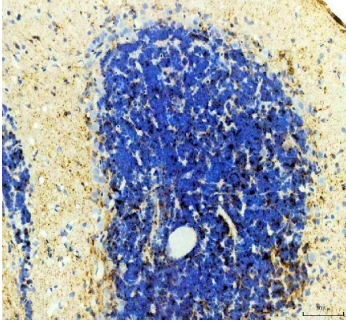
Overview

Product Name	Anti-Zebrafish DIO3A Antibody
Reactive Species	Zebrafish
Description	Boster Bio Anti-Zebrafish DIO3A Antibody catalog # AZA0A8M1P485. Tested in IHC applications. This antibody reacts with Zebrafish.
Application	IHC
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	A0A8M1P485

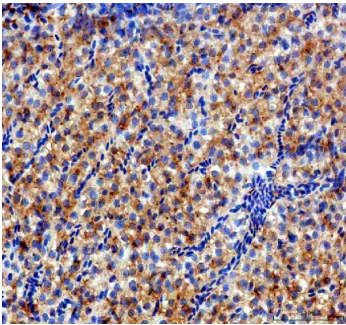
Technical Details

Immunogen	E.coli-derived Zebrafish DIO3A recombinant protein (Position: D31-G235).
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry, 2-5 ug/ml, Zebrafish

Anti-Zebrafish DIO3A Antibody (AZA0A8M1P485) Images



IHC analysis of DIO3A using anti-DIO3A antibody (AZA0A8M1P485). DIO3A was detected in a paraffin-embedded section of zebrafish brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DIO3A Antibody (AZA0A8M1P485) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of DIO3A using anti-DIO3A antibody (AZA0A8M1P485). DIO3A was detected in a paraffin-embedded section of zebrafish liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-DIO3A Antibody (AZA0A8M1P485) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

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