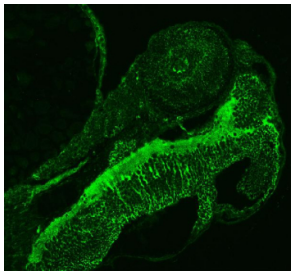
# Zebrafish Abcc12 Antibody (RZ1325)

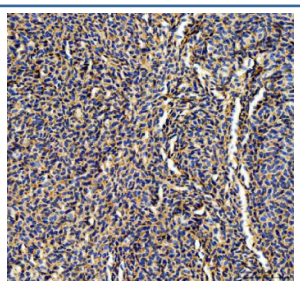
| Catalog No. | Formulation | Size |
|---|---|---|
| RZ1325 | 0.5mg/ml in PBS with 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3. | 200 ul |

**Bulk quote request**

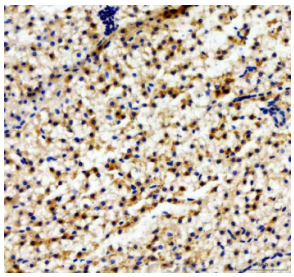
| | |
|---|---|
| **Availability** | 2-3 weeks |
| **Species Reactivity** | Zebrafish |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Antigen affinity chromatography |
| **UniProt** | F8W557 |
| **Applications** | Immunofluorescence : 5ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml |
| **Limitations** | This Zebrafish Abcc12 antibody is available for research use only. |



Immunofluorescent staining of FFPE zebrafish embryo tissue with Zebrafish Abcc12 antibody (green). HIER: steam section in pH8 EDTA buffer for 20 min.



IHC staining of FFPE zebrafish liver tissue with Abcc12 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE zebrafish colon tissue with Abcc12 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

Zebrafish Abcc12 antibody targets ATP-binding cassette subfamily C member 12 (Abcc12), a membrane-associated transporter belonging to the ABCC family of ATP-binding cassette proteins. In zebrafish, also known as Danio rerio, Abcc12 is predicted to function as an ATP-dependent transporter involved in the movement of endogenous molecules across cellular membranes. Members of the ABCC family are characterized by their role in transporting a wide range of substrates, including lipids, metabolites, and signaling molecules, and Abcc12 is thought to contribute to these conserved transport processes. Abcc12 localizes primarily to cellular membranes, consistent with its predicted transporter function and domain architecture.

Functionally, ABCC family transporters play important roles in cellular detoxification, lipid homeostasis, and regulation of intracellular signaling environments. In zebrafish, abcc12 expression has been detected during development and across multiple tissue types, suggesting a role in maintaining cellular and physiological balance during growth and differentiation. Although the specific substrates of zebrafish Abcc12 are not fully characterized, its classification within the ABCC transporter family indicates involvement in ATP-driven export or redistribution of biologically active compounds. A Zebrafish Abcc12 antibody supports studies examining transporter expression and regulation in Danio rerio.

Zebrafish provides a useful model for investigating ATP-binding cassette transporter biology due to strong evolutionary conservation and the ability to study gene function during development. Altered expression of ABCC transporters in zebrafish has been linked to changes in cellular stress responses, metabolic regulation, and tissue homeostasis. Studying Abcc12 expression patterns can therefore provide insight into how membrane transport systems contribute to developmental processes and environmental adaptation. A Zebrafish Abcc12 antibody enables analysis of Abcc12 distribution and relative abundance in developmental and physiological contexts.

From a biological relevance perspective, ABCC family members in mammals are widely studied for their roles in drug transport, lipid handling, and disease-associated transport defects. While Abcc12 remains less well characterized than other ABCC transporters, zebrafish Abcc12 offers a comparative system for exploring conserved features of ATP-dependent membrane transport and its contribution to organismal biology. Understanding Abcc12 regulation may also help clarify how less-studied ABC transporters fit into broader cellular transport networks.

At the molecular level, zebrafish Abcc12 is encoded by the abcc12 gene and produces a large multi-pass membrane protein predicted to contain multiple transmembrane helices and conserved nucleotide-binding domains required for ATP binding and hydrolysis. These structural features are hallmarks of functional ABC transporters and support its classification within the ABCC subfamily. Regulation of Abcc12 expression and activity is likely influenced by developmental cues and cellular metabolic state. A Zebrafish Abcc12 antibody supports research applications focused on membrane transport, ABC transporter biology, and developmental regulation in zebrafish, with NSJ Bioreagents providing reagents intended for research use.

## Application Notes

Optimal dilution of the Zebrafish Abcc12 antibody should be determined by the researcher.

## Storage

Store the Zebrafish Abcc12 antibody at -20oC.