# Zebrafish Csf1r Antibody / M-csfr (RZ1237)

| Catalog No. | Formulation | Size |
|---|---|---|
| RZ1237 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

## Bulk quote request

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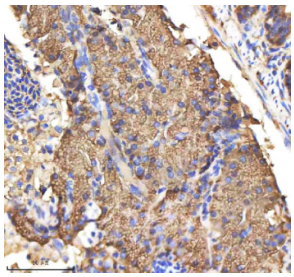
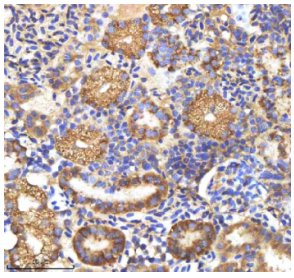
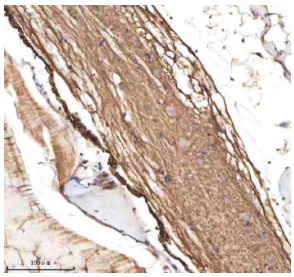
|---|---|
| **Availability** | 2-3 weeks |
| **Species Reactivity** | Zebrafish |
| **Format** | Antigen affinity purified |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit Ig |
| **Purity** | Antigen affinity chromatography |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q9I8N6 |
| **Localization** | Cell membrane |
| **Applications** | Immunohistochemistry (FFPE) : 2-5ug/ml |
| **Limitations** | This Zebrafish Csf1r antibody is available for research use only. |



IHC staining of zebrafish Csf1r protein using Zebrafish Csf1r antibody, HRP-labeled secondary and DAB substrate. M-Csf1r was detected in a paraffin-embedded section of zebrafish pancreas tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Csf1r protein using Zebrafish Csf1r antibody, HRP-labeled secondary and DAB substrate. Csf1r was detected in a paraffin-embedded section of zebrafish kidney tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Csf1r protein using Zebrafish Csf1r antibody, HRP-labeled secondary and DAB substrate. Csf1r 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.

## Description

Csf1r, or colony stimulating factor one receptor, is a transmembrane receptor tyrosine kinase that plays an essential role in the development, differentiation, and function of cells in the mononuclear phagocyte system, including macrophages and microglia. In zebrafish, Csf1r is a key regulator of innate immune cell development and is critical for the maintenance of tissue resident macrophages during embryogenesis and adulthood.

Csf1r is activated by binding to its primary ligand, colony stimulating factor one, which triggers intracellular signaling pathways involved in cell survival, proliferation, and differentiation. In zebrafish, Csf1r is expressed in the yolk sac and hematopoietic tissues early in development and marks cells that give rise to macrophages, including microglia in the brain and Kupffer cells in the liver.

Disruption of Csf1r function in zebrafish leads to reduced numbers or absence of tissue macrophages, providing a valuable model for studying the roles of these cells in development, immunity, and disease. Zebrafish Csf1r is widely used in research related to innate immunity, inflammation, neuroimmunology, and hematopoiesis.

Due to its conservation across vertebrate species, zebrafish Csf1r is also a powerful tool for investigating genetic and pharmacological regulation of macrophage biology and for modeling diseases such as neurodegeneration and immune deficiencies.

## Application Notes

Optimal dilution of the Zebrafish Csf1r antibody should be determined by the researcher.

## Immunogen

E. coli-derived zebrafish Csf1r recombinant protein (amino acids D409-C977) was used as the immunogen for the Zebrafish Csf1r antibody.

## Storage

After reconstitution, the Zebrafish Csf1r antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.