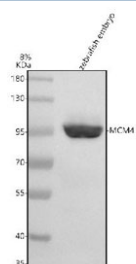


## Zebrafish Mcm4 Antibody (RZ1139)

Catalog No.	Formulation	Size
RZ1139	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

<b>Availability</b>	2-3 weeks
<b>Species Reactivity</b>	Zebrafish
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Antigen affinity chromatography
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	Q6NZV2
<b>Applications</b>	Western Blot : 0.5-1 ug/ml
<b>Limitations</b>	This Zebrafish Mcm4 antibody is available for research use only.



Western blot analysis of Mcm4 protein using Zebrafish Mcm4 antibody and zebrafish embryo tissue lysate. The predicted molecular weight of MCM4 is ~97 kDa.

## Description

Minichromosome maintenance complex component 4 (MCM4) is a core part of the MCM2-7 helicase complex, which is essential for the initiation and elongation phases of eukaryotic DNA replication. The MCM complex functions as the replicative helicase, unwinding double-stranded DNA at replication forks to enable the synthesis of new DNA strands.

In zebrafish (*Danio rerio*), *mcm4* is a highly conserved gene with critical roles during early embryogenesis and cell proliferation. Expression of *mcm4* is enriched in rapidly dividing tissues and during periods of intense developmental activity, reflecting its importance in genome stability and cell cycle progression.

Zebrafish models deficient in Mcm4 function have been used to study mechanisms of DNA replication stress, genomic instability, and the cellular response to DNA damage. Additionally, because of its conservation and similarity to human MCM4, zebrafish serves as a useful system for modeling MCM-related human disorders, such as Meier-Gorlin syndrome and cancer predisposition syndromes linked to replication licensing defects.

The zebrafish MCM4 protein is a valuable tool for investigating DNA replication dynamics, cell cycle regulation, and the molecular basis of developmental and proliferative diseases.

## Application Notes

Optimal dilution of the Zebrafish Mcm4 antibody should be determined by the researcher.

## Immunogen

An E.coli-derived zebrafish Mcm4 recombinant protein (amino acids M343-I659) was used as the immunogen for the Zebrafish Mcm4 antibody.

## Storage

After reconstitution, the Zebrafish Mcm4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.