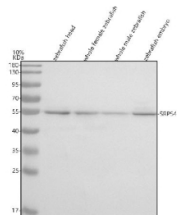


## Zebrafish Srp54 Antibody / Signal recognition particle 54 kDa protein (RZ1316)

Catalog No.	Formulation	Size
RZ1316	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>	Q7ZVN5
<b>Applications</b>	Western Blot : 0.5-1ug/ml
<b>Limitations</b>	This Zebrafish Srp54 antibody is available for research use only.



Western blot analysis of Srp54 protein using Zebrafish Srp54 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~56 kDa.

### Description

Zebrafish Srp54, also known as signal recognition particle 54 kDa protein, is a core component of the signal recognition particle complex that mediates the targeting of newly synthesized proteins to the endoplasmic reticulum membrane. Srp54 binds to the signal sequences of nascent polypeptides and plays an essential role in co translational protein targeting, ensuring that secretory and membrane proteins are properly directed to their correct cellular locations. This function is vital for maintaining protein homeostasis and efficient cellular function.

Zebrafish Srp54 is an ortholog of the human SRP54 protein and exhibits strong sequence and functional conservation. In

both zebrafish and humans, Srp54 contains a GTP binding domain and an M domain that recognizes and interacts with hydrophobic signal sequences. These conserved domains highlight the importance of Srp54 in protein translocation processes that are essential for the development and survival of eukaryotic cells.

The use of a Zebrafish Srp54 antibody allows researchers to detect and study the distribution and expression of Srp54 during early development and in various tissues. Such antibodies are valuable for western blot, immunohistochemistry, and immunofluorescence applications, providing insights into the role of the SRP pathway in protein targeting. A Zebrafish Srp54 antibody can also be used to analyze the effects of genetic mutations or experimental treatments on protein translocation and endoplasmic reticulum function.

There are no confirmed isoforms of zebrafish Srp54, and its function appears to be highly conserved across vertebrate species. By using a high-quality Zebrafish Srp54 antibody, researchers can explore the essential roles of the signal recognition particle pathway in protein sorting and its relevance to human biology and disease.

## Application Notes

Optimal dilution of the Zebrafish Srp54 antibody should be determined by the researcher.

## Immunogen

E. coli-derived zebrafish Srp54 recombinant protein (amino acids M1-K433) was used as the immunogen for the Zebrafish Srp54 antibody.

## Storage

After reconstitution, the Zebrafish Srp54 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.