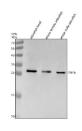


# Zebrafish Tnfa Antibody / Tnf alpha (RZ1321)

Catalog No.	Formulation	Size
RZ1321	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### **Bulk quote request**

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	Q08CQ3
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Tnfa antibody is available for research use only.



Western blot analysis of Tnfa protein using Zebrafish Tnfa antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight ~26 kDa.

## **Description**

Zebrafish Tnfa, also known as tumor necrosis factor alpha, is a key pro inflammatory cytokine involved in immune regulation, apoptosis, and host defense. Tnfa is produced mainly by activated macrophages and other immune cells, playing a central role in the inflammatory response and in the activation of downstream signaling pathways such as NF kappa B and MAP kinase cascades. It contributes to both innate and adaptive immunity and is critical for controlling infections, tissue injury responses, and immune cell recruitment.

Zebrafish Tnfa is an ortholog of the human TNF alpha protein and shares structural and functional conservation with its human counterpart. Similar to human TNF alpha, zebrafish Tnfa is synthesized as a membrane bound precursor that can

be cleaved into a soluble form, which binds to TNF receptors to initiate signaling. The conserved nature of Tnfa makes zebrafish a valuable model for studying the role of TNF alpha in inflammatory and immune related diseases.

There are no confirmed isoforms of zebrafish Tnfa, and its function appears to be largely analogous to the human protein. Research using zebrafish Tnfa provides insights into cytokine signaling, inflammation, immune cell development, and host pathogen interactions.

Antibodies against zebrafish Tnfa protein are useful for applications such as western blot, immunohistochemistry, immunofluorescence, ELISA, and flow cytometry. These tools help researchers study the dynamics of inflammatory signaling and the effects of therapeutic interventions targeting the TNF alpha pathway.

#### **Application Notes**

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

#### **Immunogen**

E. coli-derived zebrafish Tnfa recombinant protein (amino acids M1-K226) was used as the immunogen for the Zebrafish Tnfa antibody.

#### **Storage**

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