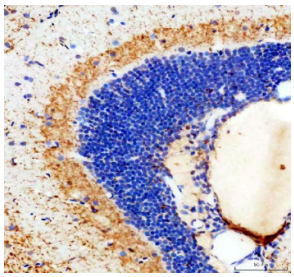
Zebrafish Stat3 Antibody (RZ1195)

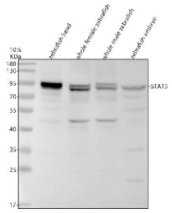
Catalog No.	Formulation	Size
RZ1195	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

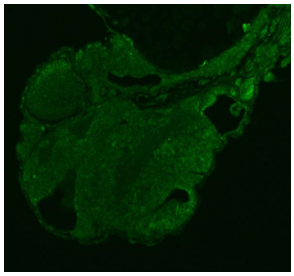
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	A0A8M2BAX1
Localization	Cytoplasm, nucleus
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml
Limitations	This Zebrafish Stat3 antibody is available for research use only.



IHC staining of FFPE zebrafish brain tissue with Zebrafish Stat3 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Stat3 protein using Zebrafish Stat3 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~92 kDa.



Immunofluorescent staining of FFPE human zebrafish embryo tissue with Zebrafish Stat3 antibody (green). HIER: steam section in pH8 EDTA buffer for 20 min.

Description

Signal transducer and activator of transcription 3 (Stat3) is a key transcription factor involved in mediating cellular responses to cytokines and growth factors. In zebrafish (Danio rerio), Stat3 plays essential roles in early embryonic development, cell proliferation, inflammation, and tissue regeneration.

Activated through phosphorylation by Janus kinases (JAKs), Stat3 translocates to the nucleus, where it regulates target gene expression. In zebrafish, stat3 is dynamically expressed during embryogenesis and is required for processes such as gastrulation, organogenesis, and stem cell maintenance. It has been shown to be critical for liver and heart regeneration, as well as for innate immune responses to infection and injury.

Due to its high conservation and broad functional relevance, zebrafish Stat3 serves as a powerful model for studying JAK/STAT signaling, immune regulation, oncogenesis, and regenerative biology. It is also widely used in research on inflammatory diseases, developmental disorders, and signal transduction mechanisms in vertebrates.

Application Notes

Optimal dilution of the Zebrafish Stat3 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Stat3 recombinant protein (amino acids K64-S335) was used as the immunogen for the Zebrafish Stat3 antibody.

Storage

After reconstitution, the Zebrafish Stat3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.