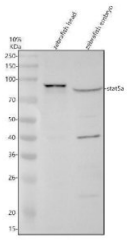
Zebrafish STAT5A Antibody / Signal Transducer And Activator Of Transcription 5 Antibody (RZ1451)

Catalog No.	Formulation	Size
RZ1451	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/mL.
UniProt	Q68SP3
Applications	Western blot: 0.5-1ug/ml
Limitations	This Zebrafish STAT5A Antibody / Signal Transducer And Activator Of Transcription 5A Antibody is available for research use only.



Zebrafish STAT5A Antibody WB. Western blot analysis of STAT5A expression using anti-STAT5A antibody. STAT5A, also known as Signal Transducer And Activator Of Transcription 5, is a cytokine responsive transcription factor that mediates JAK STAT signaling and regulates cellular growth, differentiation, and immune responses. Lane 1: zebrafish head tissue lysate. Lane 2: zebrafish embryo tissue lysate. A major band was detected at approximately 87 kDa, corresponding to the expected molecular weight of STAT5A. An additional band at approximately 43 kDa was observed in embryo lysates and may represent a proteolytic fragment, alternatively spliced isoform, or processed form of Signal Transducer And Activator Of Transcription 5. These results demonstrate expression of STAT5A in zebrafish tissues and support the utility of this antibody for studies of cytokine signaling, hematopoiesis, and developmental biology.

Description

Zebrafish STAT5A Antibody / Signal Transducer And Activator Of Transcription 5 Antibody recognizes STAT5A, a member of the STAT family of latent cytoplasmic transcription factors that mediates cellular responses to cytokines, growth factors, and hormones. STAT5A is activated through phosphorylation by Janus kinases following stimulation of receptors for prolactin, growth hormone, interleukins, and other signaling molecules. Upon activation, STAT5A dimerizes

and translocates to the nucleus, where it regulates the expression of genes involved in cell proliferation, differentiation, survival, and immune function.

In zebrafish, STAT5A contributes to hematopoiesis, immune responses, and developmental processes controlled by cytokine signaling pathways. Activation of the JAK STAT pathway regulates numerous biological functions including growth, metabolism, and tissue homeostasis. Because STAT signaling mechanisms are highly conserved among vertebrates, zebrafish provide an effective model for studying cytokine mediated gene regulation and developmental biology. Alterations in STAT5A activity have been associated with abnormal cell growth and impaired immune responses in mammalian systems.

STAT5A functions downstream of multiple cytokine receptors and participates in signaling networks that influence stem cell maintenance, lymphocyte development, and endocrine responses. Aberrant activation of STAT5A has been implicated in leukemia, lymphoma, breast cancer, and other proliferative disorders. Consequently, STAT5A has emerged as an important target for studies of signal transduction, hematopoiesis, and oncogenic pathways.

Zebrafish STAT5A Antibody / Signal Transducer And Activator Of Transcription 5 Antibody is useful for investigations of JAK STAT signaling, developmental biology, immune regulation, and hematopoiesis. The evolutionary conservation of STAT5A makes zebrafish an excellent model for understanding cytokine dependent signaling pathways and mechanisms involved in growth, differentiation, and disease.

This Zebrafish antibody is part of a broader Zebrafish / Danio rerio antibody panel offered by NSJ Bioreagents.

Application Notes

The optimal working dilution of the Zebrafish STAT5A Antibody / Signal Transducer And Activator Of Transcription 5A Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish STAT5A recombinant protein (amino acids D62-H726) was used as the immunogen for the Zebrafish STAT5A Antibody.

Storage

After reconstitution, the Zebrafish STAT5A Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish Signal Transducer And Activator Of Transcription 5A Antibody, Zebrafish STAT5 Antibody, Zebrafish STAT5A Transcription Factor Antibody, Zebrafish Cytokine Signaling Protein Antibody, Zebrafish JAK STAT Pathway Protein Antibody, Zebrafish STAT Family Transcription Factor Antibody

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