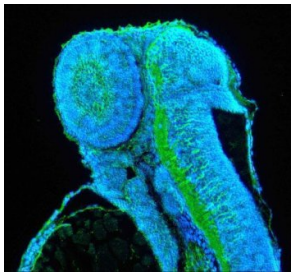
Zebrafish c-Jun Antibody / JUN Antibody (RZ1378)

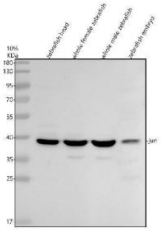
Catalog No.	Formulation	Size
RZ1378	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	Q6NZT5
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml
Limitations	This Zebrafish c-Jun Antibody / JUN Antibody is available for research use only.



Zebrafish c-Jun Antibody Embryo IF. Immunofluorescent staining of paraffin-embedded zebrafish embryo tissue using Zebrafish c-Jun Antibody / JUN Antibody demonstrates distinct green fluorescence within developing embryonic and neural-associated tissue structures, consistent with expression of c-Jun (JUN), a member of the AP-1 family of transcription factors. c-Jun functions as a key regulator of gene expression involved in embryonic development, cellular differentiation, stress responses, and tissue regeneration. The staining pattern highlights regions of active developmental signaling and transcriptional regulation within the embryo, while DAPI (blue) counterstains cell nuclei. Heat-mediated antigen retrieval was performed in EDTA buffer. Sections were blocked with 10% goat serum and incubated overnight at 4Â°C with 5 Âµg/ml primary antibody, followed by DyLight 488-conjugated goat anti-rabbit IgG secondary antibody at 1:500 dilution for 30 minutes at 37Â°C.



Zebrafish c-Jun Antibody Western Blot. Western blot analysis of zebrafish head tissue lysate (lane 1), whole female zebrafish tissue lysate (lane 2), whole male zebrafish tissue lysate (lane 3), and zebrafish embryo tissue lysate (lane 4) using Zebrafish c-Jun Antibody / JUN Antibody demonstrates a distinct band at approximately 39 kDa, consistent with detection of c-Jun (JUN). c-Jun is a member of the AP-1 family of transcription factors that regulates gene expression involved in embryonic development, cellular differentiation, stress responses, and tissue regeneration. Detection of c-Jun in adult and embryonic zebrafish tissues supports its broad role in developmental signaling and transcriptional regulation. Electrophoresis was performed using a 10% SDS-PAGE gel under reducing conditions with 30 Âµg of protein loaded per lane. Signal was visualized using HRP-conjugated secondary antibody and ECL detection.

Description

Zebrafish c-Jun Antibody / JUN Antibody is useful for studying c-Jun (JUN), a member of the activator protein-1 (AP-1) family of transcription factors that regulates gene expression in response to developmental cues, environmental stimuli, and cellular stress signals. c-Jun functions as a DNA-binding transcriptional regulator that forms homo- or heterodimers with other AP-1 family proteins to control transcriptional programs involved in cell proliferation, differentiation, survival, apoptosis, and tissue remodeling. Because AP-1 signaling integrates multiple upstream pathways, c-Jun serves as a key regulator of cellular adaptation and developmental gene expression.

In zebrafish, c-Jun plays important roles during embryogenesis, organogenesis, nervous system development, and tissue regeneration. Expression of JUN can be rapidly induced following cellular injury, inflammatory stimulation, oxidative stress, and activation of mitogen-activated protein kinase (MAPK) signaling pathways. As a result, c-Jun is frequently studied as a marker of transcriptional activation and cellular stress responses during developmental and regenerative processes.

The biologic activity of c-Jun is tightly regulated through phosphorylation and interactions with other AP-1 family members. Activated c-Jun influences expression of genes involved in cell-cycle progression, differentiation programs, tissue repair mechanisms, and responses to environmental stress. Through these functions, JUN contributes to the coordination of complex gene expression networks that regulate growth, regeneration, and cellular adaptation throughout development.

Zebrafish has become an important model organism for studying AP-1 signaling because of its rapid development, genetic tractability, and remarkable regenerative capacity. c-Jun has attracted particular interest in studies examining fin regeneration, neural regeneration, wound healing, tissue remodeling, and developmental signaling pathways. Analysis of JUN expression can provide insight into molecular mechanisms that govern injury responses and regeneration-associated transcriptional programs.

Beyond its role in regeneration biology, c-Jun participates in signaling pathways that influence cell fate decisions, morphogenesis, and tissue patterning. Because AP-1 transcription factors function downstream of growth factor signaling, stress-activated kinases, and inflammatory mediators, JUN is widely utilized as a marker of transcriptional responses to extracellular stimuli. These characteristics make c-Jun a valuable target for developmental biology, regenerative medicine, and signal transduction research.

Zebrafish c-Jun antibodies are commonly used in immunohistochemistry, immunofluorescence, western blotting, and related protein detection applications to evaluate AP-1 transcription factor expression and localization. These reagents support investigations of developmental signaling, tissue regeneration, stress-response pathways, transcriptional regulation, and cellular adaptation in zebrafish research models.

Learn more about c-Jun function in transcriptional regulation, AP-1 signaling, cellular stress responses, and gene expression control on our c-Jun Antibody page.

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 c-Jun Antibody / JUN Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish c-Jun/JUN recombinant protein (amino acids M1-F308) was used as the immunogen for the Zebrafish c-Jun Antibody.

Storage

After reconstitution, the Zebrafish c-Jun 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 JUN Antibody, Zebrafish AP-1 Transcription Factor Antibody, Zebrafish Activator Protein 1 Antibody, Zebrafish Proto-Oncogene c-Jun Antibody, Zebrafish Stress Response Transcription Factor Antibody, Zebrafish Immediate Early Response Protein Antibody

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