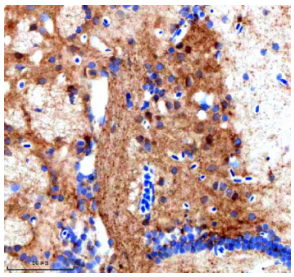
Zebrafish Srsf3 Antibody / Serine/arginine-rich splicing factor 3 / Isoforms a & b (RZ1079)

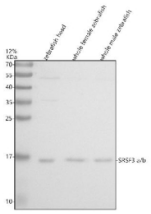
Catalog No.	Formulation	Size
RZ1079	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

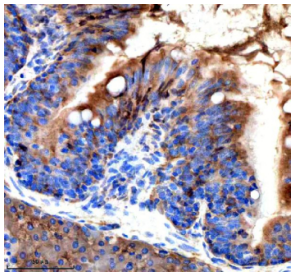
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q801U3, A5WWG4
Localization	Nuclear, cytoplasmic
Applications	Western blot: 0.5-1 ug/ml Immunohistochemistry (FFPE): 2-5 ug/ml
Limitations	This Zebrafish Srsf3 antibody is available for research use only.



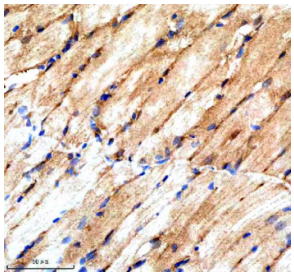
Zebrafish Srsf3 Antibody Brain IHC. Immunohistochemistry staining of FFPE zebrafish brain tissue with Zebrafish Srsf3 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Srsf3 Antibody WB. Western blot analysis of Srsf3a/b protein using Zebrafish Srsf3 antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight: 19-20 kDa.



Zebrafish Srsf3 Antibody Colon IHC. Immunohistochemistry staining of FFPE zebrafish colon tissue with Zebrafish Srsf3 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Srsf3 Antibody Skeletal Muscle IHC. Immunohistochemistry staining of FFPE zebrafish skeletal muscle tissue with Zebrafish Srsf3 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Zebrafish (Danio rerio) Srsf3 antibody recognizes Serine-arginine-rich splicing factor 3, detecting isoforms a and b encoded by the zebrafish srsf3 gene. Srsf3 is a key member of the SR protein family, a group of essential RNA-binding and splicing regulators that control exon selection, mRNA stability, nuclear export, and translation. In Danio rerio embryos, srsf3 is expressed broadly across proliferative and differentiating tissues, with notable enrichment in developing brain, neural tube, somites, heart, vasculature, and endoderm-derived organs such as liver and pancreas. Subcellular localization is primarily nuclear, particularly within speckles associated with pre-mRNA splicing, with additional cytoplasmic roles in mRNA transport and translation.

Serine-arginine-rich splicing factor 3 regulates alternative splicing events that shape tissue-specific transcriptomes during early development. By binding exonic splicing enhancers and influencing spliceosome assembly, Srsf3 directs inclusion or exclusion of exons in transcripts encoding transcription factors, cytoskeletal proteins, signaling molecules, and metabolic enzymes. These splicing decisions help establish cell identity, regulate developmental timing, and support proper organogenesis. Isoforms a and b contribute overlapping but distinct regulatory profiles, reflecting the complexity of splicing control during zebrafish embryogenesis.

Neural development is especially dependent on Srsf3-mediated alternative splicing. Neural progenitors and differentiating neurons undergo extensive transcript diversification as regions of the brain and spinal cord form. Srsf3 regulates splicing of transcripts that influence neuroepithelial polarity, neuronal lineage commitment, cytoskeletal organization, and synaptic maturation. Disruption of srsf3 function can impair neurogenesis, alter regional patterning, or compromise neuronal viability by destabilizing critical transcripts required for neural circuit formation.

Somite and muscle development also rely on alternative splicing programs coordinated in part by Srsf3. Myogenic progenitors require precise control of splice variants that affect muscle-specific transcription factors, contractile proteins, and regulators of cytoskeletal architecture. As somites segment and myotomes form, Srsf3 helps ensure correct expression of splicing-dependent isoforms that support early muscle fiber alignment and differentiation.

Cardiac development requires robust RNA processing and splicing regulation. In the embryonic heart, Srsf3 influences expression of isoforms involved in cardiomyocyte proliferation, stress responses, contractile protein assembly, and metabolic adaptation. Endothelial tissues also rely on Srsf3 to regulate splicing of genes that guide angiogenic sprouting, lumen formation, and vascular stability. Aberrant splicing within these tissues can disrupt heart looping, vessel patterning, or cardiac output.

Endoderm-derived organs depend on Srsf3 to support their rapid metabolic and structural maturation. Developing liver and pancreas require splicing-dependent regulation of genes involved in metabolism, secretion, stress resilience, and cell differentiation. Srsf3 contributes to the selection of isoforms that fine-tune transcriptional networks during early organ expansion.

This Zebrafish Srsf3 antibody is suitable for detecting Serine-arginine-rich splicing factor 3 isoforms a and b in research focused on RNA splicing, neural and muscle development, cardiac and vascular formation, and metabolic organogenesis in zebrafish. NSJ Bioreagents provides this reagent within its zebrafish and RNA-processing antibody portfolio.

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

Application Notes

Optimal dilution of the Zebrafish Srsf3 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Srsf3a/b recombinant protein (amino acids P4-A33) was used as the immunogen for the Zebrafish Srsf3 antibody. This antibody will detect the a and b isoforms.

Storage

After reconstitution, the Zebrafish Srsf3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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