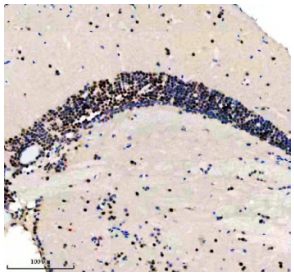
Zebrafish Luc7l3 Antibody / Luc7-like protein 3 (RZ1093)

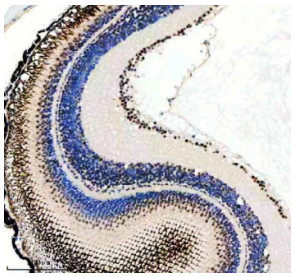
Catalog No.	Formulation	Size
RZ1093	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

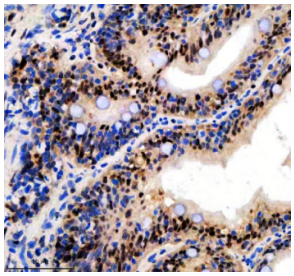
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	A1L1N4
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 2-5 ug/ml Immunofluorescence: 5ug/ml
Limitations	This Zebrafish Luc7l3 antibody is available for research use only.



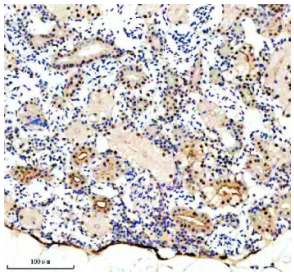
Zebrafish Luc7l3 Antibody Brain IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



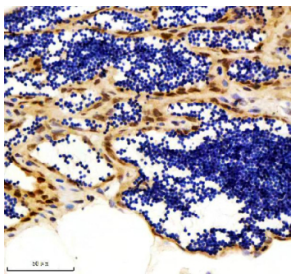
Zebrafish Luc7l3 Antibody Eye IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish eye tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



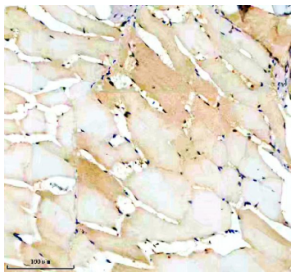
Zebrafish Luc7l3 Antibody Colon IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish colon tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



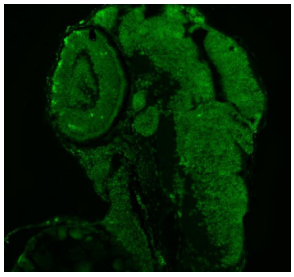
Zebrafish Luc7l3 Antibody Kidney IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish kidney tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Luc7l3 Antibody Testis IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish testis tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Luc7l3 Antibody Muscle IHC. Immunohistochemical analysis of Luc7-like protein 3 using Zebrafish Luc7l3 antibody and paraffin-embedded zebrafish muscle tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Zebrafish Luc7l3 Antibody Embryo IF. Immunofluorescent staining of FFPE zebrafish embryo tissue with Zebrafish Luc7l3 antibody (green). HIER: steam section in pH8 EDTA buffer for 20 min.

Description

Zebrafish (Danio rerio) Luc7l3 antibody detects Luc7-like protein 3, a conserved RNA binding and splicing regulatory factor that contributes to spliceosome assembly and pre mRNA processing. In zebrafish, the luc7l3 gene encodes a protein containing characteristic zinc finger and U1 snRNP associated motifs, which facilitate binding to early spliceosomal components and regulatory RNA elements. As an essential contributor to the fidelity of pre mRNA splicing, Luc7-like protein 3 influences transcript maturation across numerous developmental pathways. These functions make Luc7-like protein 3 antibody reagents valuable tools for examining RNA processing and gene expression regulation in vertebrate systems.

Luc7-like protein 3 participates in the assembly and stabilization of the U1 small nuclear ribonucleoprotein complex, which recognizes 5 prime splice sites and initiates spliceosome formation. Through its RNA interaction domains, the protein helps ensure that exon intron boundaries are accurately identified, affecting the splicing of transcripts involved in neural development, somite formation, and organogenesis. In zebrafish embryos, luc7l3 is expressed in neural tissues, developing musculature, and proliferative regions requiring robust transcriptional activity. Loss or reduction of luc7l3 function can alter splicing patterns, disrupt tissue organization, and impair normal developmental progression.

Beyond its role in splice site recognition, Luc7-like protein 3 contributes to alternative splicing decisions that expand proteomic diversity during early development. By modulating exon inclusion, the protein influences pathways controlling cytoskeletal dynamics, cell cycle progression, and metabolic balance. Its involvement in these networks highlights the importance of precise RNA processing during embryogenesis, when small shifts in splicing patterns can produce significant effects on tissue differentiation and morphogenesis.

Subcellular localization studies indicate that Luc7-like protein 3 resides predominantly in the nucleus, concentrated within speckle like structures associated with active splicing machinery. It interacts with components of the U1 snRNP complex, SR rich splicing regulators, and other RNA binding proteins involved in transcript maturation. These interactions underscore its position within the core splicing framework and support its regulatory influence over multiple gene expression programs. Zebrafish models provide strong advantages for studying these processes due to their rapid development and visual accessibility for transcript analysis.

Luc7-like protein 3 also participates in stress responsive RNA processing pathways. Under certain cellular conditions, its distribution may shift, influencing spliceosomal assembly or the expression of stress regulated transcripts. These context dependent roles contribute to broader gene expression plasticity during development and environmental adaptation. Because splicing defects are associated with neurological, muscular, and metabolic dysfunction in vertebrates, understanding Luc7-like protein 3 function in zebrafish provides insights relevant to human biology as well.

The Zebrafish Luc7l3 antibody is suitable for western blotting, immunohistochemistry, and related assays used to monitor nuclear splicing regulators across developmental stages. This reagent detects endogenous Luc7-like protein 3 without implying epitope mapping or literature validated specificity. NSJ Bioreagents provides the Zebrafish Luc7l3 antibody to support research in RNA processing, alternative splicing, neural development, and transcriptional regulation.

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

Application Notes

Optimal dilution of the Zebrafish Luc7l3 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Luc7-like protein 3 recombinant protein (amino acids D30-H211) was used as the immunogen for the Zebrafish Luc7l3 antibody.

Storage

After reconstitution, the Zebrafish Luc7l3 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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