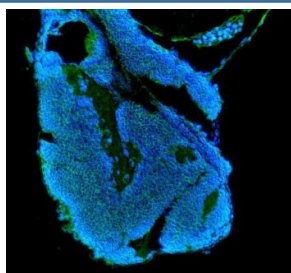


Zebrafish IGF1 Receptor Antibody / IGF1RA Antibody (RZ1334)

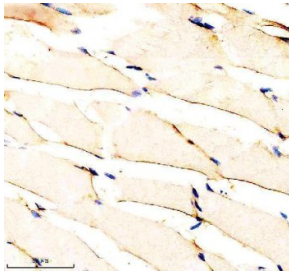
Catalog No.	Formulation	Size
RZ1334	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

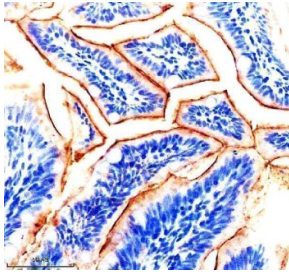
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/ml.
UniProt	A0A8M6YTF7
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml
Limitations	This Zebrafish IGF1 Receptor Antibody / IGF1RA Antibody is available for research use only.



Zebrafish IGF1 Receptor / IGF1RA Antibody Embryo IF. Immunofluorescent staining of FFPE zebrafish embryo tissue using Zebrafish IGF1 Receptor Antibody demonstrates distinct green fluorescence within developing embryonic tissue compartments against a blue DAPI nuclear counterstain background. The staining pattern is consistent with expression of Insulin-Like Growth Factor 1 Receptor Alpha (IGF1RA), a receptor tyrosine kinase that mediates growth factor signaling involved in cellular proliferation, differentiation, survival, and developmental regulation. Signal is observed throughout embryonic structures undergoing active growth and morphogenesis, reflecting the established role of IGF signaling pathways in vertebrate development. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4Â°C followed by detection using a DyLight 488-conjugated goat anti-rabbit secondary antibody. Nuclei were counterstained with DAPI.



Zebrafish IGF1 Receptor / IGF1RA Antibody Muscle IHC. Immunohistochemistry staining of FFPE zebrafish muscle tissue using Zebrafish IGF1 Receptor Antibody demonstrates diffuse cytoplasmic HRP-DAB brown staining throughout elongated skeletal muscle fibers. The staining pattern is consistent with expression of Insulin-Like Growth Factor 1 Receptor Alpha (IGF1RA), a receptor tyrosine kinase that mediates growth factor signaling involved in cellular proliferation, differentiation, metabolism, and muscle development. Signal is observed within myofiber-associated cellular compartments, reflecting the established role of IGF signaling in skeletal muscle growth, maintenance, and tissue homeostasis. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4°C followed by detection using a peroxidase-conjugated goat anti-rabbit secondary antibody and DAB chromogen.



Zebrafish IGF1 Receptor / IGF1RA Antibody Colon IHC. Immunohistochemistry staining of FFPE zebrafish colon tissue using Zebrafish IGF1 Receptor Antibody demonstrates prominent membranous and cytoplasmic HRP-DAB brown staining within glandular epithelial cell populations lining the intestinal mucosa. The staining pattern is consistent with expression of Insulin-Like Growth Factor 1 Receptor Alpha (IGF1RA), a receptor tyrosine kinase that regulates growth factor signaling involved in cellular proliferation, differentiation, survival, and tissue homeostasis. Strong epithelial-associated staining is consistent with the established role of IGF signaling in gastrointestinal development, epithelial maintenance, and regulation of intestinal growth. Heat mediated antigen retrieval was performed in EDTA buffer. Primary antibody was incubated overnight at 4°C followed by detection using a peroxidase-conjugated goat anti-rabbit secondary antibody and DAB chromogen.

Description

Zebrafish IGF1 Receptor Antibody / IGF1RA Antibody recognizes Insulin-Like Growth Factor 1 Receptor Alpha (IGF1RA), a transmembrane receptor tyrosine kinase that mediates the biological effects of insulin-like growth factors and plays a central role in growth, development, metabolism, and cellular survival. IGF1RA is one of the zebrafish paralogs of the mammalian IGF1 receptor and functions through activation of intracellular signaling pathways including PI3K-AKT and MAPK cascades. Upon binding insulin-like growth factors, IGF1RA promotes cellular proliferation, differentiation, survival, and metabolic regulation. The highly conserved nature of IGF signaling has made zebrafish an important vertebrate model for investigating the developmental and physiological functions of this receptor.

IGF signaling is essential for normal embryonic growth and organ development. In zebrafish, IGF1RA contributes to regulation of body growth, skeletal formation, muscle development, nervous system maturation, and tissue homeostasis. Expression of IGF1RA is frequently examined in studies investigating developmental signaling pathways, endocrine regulation, and growth control mechanisms. Because the zebrafish embryo develops externally and remains optically transparent during early life stages, researchers can directly observe the consequences of altered IGF signaling during vertebrate development.

Beyond its developmental functions, IGF1RA plays a major role in regulating cellular metabolism and survival. Activation of the receptor promotes anabolic processes, supports cellular growth, and protects cells from apoptosis under physiological and stress-associated conditions. Dysregulation of IGF signaling pathways has been linked to developmental abnormalities, metabolic disorders, aging-related processes, and cancer-associated signaling mechanisms. Consequently, IGF1RA remains an important target in studies focused on growth factor signaling, regenerative biology, and disease pathogenesis.

Zebrafish models have become increasingly valuable for investigating IGF-dependent signaling because many of the molecular pathways governing growth and metabolism are highly conserved among vertebrates. Researchers frequently evaluate IGF1RA expression during studies of tissue regeneration, endocrine function, skeletal development, muscle

biology, and environmental influences on growth regulation. Because IGF signaling interacts with numerous developmental and metabolic pathways, IGF1RA serves as a useful marker for examining cellular responses to physiological and experimental perturbations.

At NSJ Bioreagents, we provide highly validated antibodies for developmental biology, endocrinology, metabolism, and zebrafish research. Zebrafish IGF1 Receptor Antibody / IGF1RA Antibody targets a key receptor involved in growth factor signaling and cellular development. IGF1RA expression is widely studied in the context of growth regulation, tissue development, metabolism, regeneration, and intracellular signaling pathways. Continued investigation of this receptor is expanding our understanding of the molecular mechanisms that govern vertebrate growth, cellular homeostasis, and developmental physiology.

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 IGF1 Receptor Antibody / IGF1RA Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish IGF1RA recombinant protein (amino acids H36-R886) was used as the immunogen for the Zebrafish IGF1RA / IGF1 Receptor Antibody.

Storage

After reconstitution, the Zebrafish IGF1RA / IGF1 Receptor 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 IGF1RA Antibody, Zebrafish Insulin-Like Growth Factor 1 Receptor Alpha Antibody, Zebrafish IGF-1 Receptor Antibody, Zebrafish Insulin-Like Growth Factor Receptor Antibody, Zebrafish Growth Factor Receptor Antibody, Zebrafish IGF Signaling Receptor Antibody