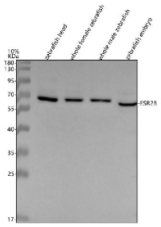
Zebrafish Estrogen receptor 2b Antibody / Esr2b (RZ1221)

Catalog No.	Formulation	Size
RZ1221	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
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	B8JJL3
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Estrogen receptor 2b antibody is available for research use only.



Western blot analysis of Estrogen receptor 2b protein using Zebrafish Estrogen receptor 2b antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~66 kDa.

Description

Esr2b, or estrogen receptor 2b, is one of the two estrogen receptor beta isoforms found in zebrafish and is part of the nuclear receptor family of transcription factors. Esr2b plays a key role in mediating the biological effects of estrogens by regulating the expression of target genes involved in development, reproduction, and homeostasis.

In zebrafish, Esr2b is expressed in a variety of tissues including the brain, liver, gonads, and developing embryos. Upon binding to estrogens such as estradiol, Esr2b translocates to the nucleus where it binds to specific DNA sequences known as estrogen response elements to modulate gene transcription. Esr2b has been shown to influence processes such as sexual differentiation, oocyte maturation, and endocrine signaling.

Esr2b is functionally distinct from the closely related Esr2a and Esr1 receptors, and its expression pattern suggests it may have specialized roles in estrogen signaling pathways. Zebrafish provide a powerful model to study Esr2b function in vivo, including the effects of environmental estrogens and endocrine disrupting compounds on gene regulation and reproductive health.

Due to its importance in estrogen mediated gene regulation and its responsiveness to hormonal and environmental cues, zebrafish Esr2b is widely used in research focused on reproductive biology, developmental endocrinology, toxicology, and hormone responsive gene networks.

Application Notes

Optimal dilution of the Zebrafish Estrogen receptor 2b antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Estrogen receptor 2b recombinant protein (amino acids R27-N592) was used as the immunogen for the Zebrafish Estrogen receptor 2b antibody.

Storage

After reconstitution, the Zebrafish Estrogen receptor 2b antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.