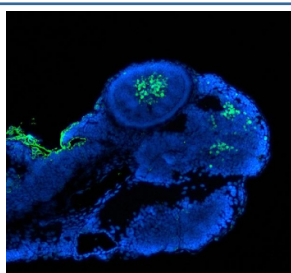


Zebrafish Pax6 Antibody / Pax6a / Pax6b (RZ1200)

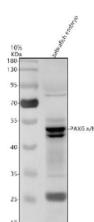
Catalog No.	Formulation	Size
RZ1200	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

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	P26630
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml
Limitations	This Zebrafish Pax6 antibody is available for research use only.



Immunofluorescent staining of PAX6 protein using FFPE zebrafish embryo tissue and Zebrafish Pax6 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH8 EDTA buffer for 20 min.



Western blot analysis of Pax6 protein using Zebrafish Pax6 antibody and zebrafish embryo tissue lysates. Predicted molecular weight ~48 kDa.

Description

Paired box protein 6 (Pax6) is a highly conserved transcription factor that plays a central role in the development of the eye, central nervous system, and pancreas. In zebrafish (*Danio rerio*), Pax6 is encoded by two paralogous genes, *pax6a* and *pax6b*, both of which are essential for ocular morphogenesis, neurogenesis, and endocrine cell differentiation.

During embryogenesis, zebrafish Pax6 is expressed in the forebrain, optic vesicles, retina, and spinal cord, where it regulates the expression of genes critical for cell fate determination and tissue patterning. Pax6 is a key regulator of eye field specification and is required for the proper formation of structures such as the lens, retina, and optic tectum. In addition, it contributes to pancreatic islet cell development, particularly in the differentiation of insulin-producing Beta-cells.

Given its evolutionary conservation and well-characterized functions, zebrafish Pax6 is widely used as a model for studying ocular development, neural differentiation, congenital eye disorders (e.g., aniridia), and transcriptional control of organogenesis.

Application Notes

Optimal dilution of the Zebrafish Pax6 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Pax6 recombinant protein (amino acids M1-M401) was used as the immunogen for the Zebrafish Pax6 antibody. This antibody will detect isoforms a & b.

Storage

After reconstitution, the Zebrafish Pax6 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.