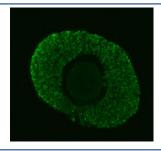


# Zebrafish Dgcr8 Antibody (RZ1217)

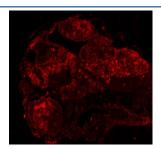
Catalog No.	Formulation	Size
RZ1217	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

## **Bulk quote request**

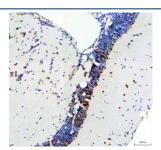
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	A2BEG3
Localization	Nucleus, Nucleolus
Applications	Immunofluorescence : 5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Dgcr8 antibody is available for research use only.



Immunofluorescent staining of Dgcr8 protein using Zebrafish Dgcr8 antibody (green) and zebrafish embryo tissue. HIER: steam section in pH8 EDTA buffer for 20 min.



Immunofluorescent staining of Dgcr8 protein using Zebrafish Dgcr8 antibody (red) and zebrafish embryo tissue. HIER: steam section in pH8 EDTA buffer for 20 min.



IHC staining of FFPE zebrafish brain tissue with Dgcr8 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## **Description**

Dgcr8, or DiGeorge syndrome critical region gene eight, is a double stranded RNA binding protein that plays a key role in the microRNA processing pathway. In zebrafish, Dgcr8 is an essential component of the microprocessor complex, which includes the ribonuclease enzyme Drosha. Together, they initiate the first step in converting primary microRNA transcripts into precursor microRNAs, which are further processed into mature microRNAs.

MicroRNAs are short noncoding RNAs that regulate gene expression by targeting messenger RNAs for degradation or translational repression. Dgcr8 is crucial for maintaining proper levels of microRNAs, which are involved in numerous biological processes including early development, cell differentiation, neurogenesis, and organ formation.

In zebrafish, Dgcr8 is expressed during early embryogenesis and is required for normal development of the brain, heart, and other organs. Loss of Dgcr8 function results in widespread defects due to disrupted microRNA biogenesis. Because of its evolutionary conservation and central role in RNA regulation, zebrafish Dgcr8 is widely used in studies of gene expression control, developmental biology, and disease models related to microRNA dysfunction.

### **Application Notes**

Optimal dilution of the Zebrafish Dgcr8 antibody should be determined by the researcher.

#### **Immunogen**

E. coli-derived zebrafish Dgcr8 recombinant protein (amino acids K570-Q771) was used as the immunogen for the Zebrafish Dgcr8 antibody.

#### **Storage**

After reconstitution, the Zebrafish Dgcr8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.