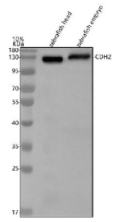
Zebrafish N-cadherin Antibody / Ncad / Cdh2 / Cadherin 2 (RZ1246)

Catalog No.	Formulation	Size
RZ1246	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	Q90275
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish N-cadherin antibody is available for research use only.



Western blot analysis of N-cadherin protein using Zebrafish N-cadherin antibody and 1) zebrafish head tissue lysates and 2) zebrafish embryo tissue lysate. Predicted molecular weight ~97 kDa but may be observed at higher molecular weights due to glycosylation.

Description

N cadherin, also known as Ncad, cadherin 2 and neural cadherin, is a calcium dependent cell adhesion molecule that plays a critical role in the formation and maintenance of tissue architecture during development. In zebrafish, N cadherin is essential for processes such as gastrulation, neurulation, somite formation, and organ morphogenesis.

Zebrafish N cadherin is the ortholog of the human CDH2 gene, which encodes the same protein. Both zebrafish and human N cadherin are members of the classical cadherin family and share a conserved structure that includes extracellular cadherin repeats, a single transmembrane domain, and a cytoplasmic region that interacts with catenins to link cell adhesion to the actin cytoskeleton.

In zebrafish embryos, N cadherin is expressed in the developing nervous system, heart, somites, and other tissues undergoing epithelial to mesenchymal transitions. It mediates homophilic cell-cell adhesion, ensuring coordinated cell movements and stable tissue organization. Loss of N cadherin function in zebrafish results in severe developmental defects, including impaired brain morphogenesis, defective heart formation, and abnormal cell migration.

Due to its strong evolutionary conservation and fundamental role in cell adhesion and signaling, zebrafish N cadherin is widely used as a model to study developmental biology, tissue engineering, cancer metastasis, and congenital disorders involving cadherin dysfunction.

Application Notes

Optimal dilution of the Zebrafish N-cadherin antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish N-cadherin recombinant protein (amino acids M25-R810) was used as the immunogen for the Zebrafish N-cadherin antibody.

Storage

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