

Zebrafish Mib1 Antibody / Mind bomb 1 (RZ1238)

Catalog No.	Formulation	Size
RZ1238	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	Q804S5
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Mib1 antibody is available for research use only.



Western blot analysis of Mib1 protein using Zebrafish Mib1 antibody and 1) zebrafish head tissue lysates. Predicted molecular weight ~113 kDa.

Description

Mib1, or mind bomb one, is an essential E three ubiquitin ligase that plays a critical role in the regulation of Notch signaling during vertebrate development. In zebrafish, Mib1 is necessary for the proper functioning of the Notch pathway, which controls cell fate decisions, tissue patterning, and the formation of organs such as the brain, spinal cord, and somites.

Mib1 functions by promoting the ubiquitination and endocytosis of Delta ligands on the surface of signal sending cells. This endocytosis is required for activation of the Notch receptor in neighboring cells. In zebrafish embryos, Mib1 is expressed in regions undergoing active cell differentiation and tissue segmentation. Loss of Mib1 function leads to

widespread defects in neurogenesis, somitogenesis, and other Notch dependent processes.

Studies using zebrafish mutants have shown that Mib1 is critical for lateral inhibition in the developing nervous system, the formation of the segmented body axis, and the maintenance of progenitor pools in various tissues. Because of its conserved function across vertebrates, zebrafish Mib1 is a widely used model for understanding the molecular mechanisms of Notch signaling and its role in development and disease.

Zebrafish Mib1 is especially valuable in genetic and pharmacological screens aimed at identifying modifiers of the Notch pathway and related developmental disorders.

Application Notes

Optimal dilution of the Zebrafish Mib1 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Mib1 recombinant protein (amino acids I78-K995) was used as the immunogen for the Zebrafish Mib1 antibody.

Storage

After reconstitution, the Zebrafish Mib1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.