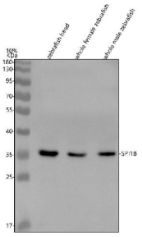
Zebrafish Spi1b Antibody | Pu.1b | Spi1 (RZ1314)

Catalog No.	Formulation	Size
RZ1314	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	A0A8M2BG46
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Spi1b antibody is available for research use only.



Western blot analysis of Spi1b protein using Zebrafish Spi1b antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~35 kDa.

Description

Zebrafish Spi1b, also known as PU.1b, is a transcription factor that belongs to the ETS family of DNA binding proteins. Spi1b plays a critical role in the development of hematopoietic lineages, particularly in the differentiation of myeloid and lymphoid cells. It regulates genes involved in immune cell development, function, and response, making it an essential factor for studying blood formation and immune system regulation during zebrafish embryogenesis.

Zebrafish Spi1b is an ortholog of the human SPI1 protein, also known as PU.1, and shares high sequence and functional conservation. Similar to its human counterpart, Spi1b binds to specific ETS motifs in gene promoters and enhancers to activate or repress target genes. It is particularly important in the early stages of myelopoiesis and is a key regulator of

macrophage and neutrophil lineage commitment.

The use of a Zebrafish Spi1b antibody allows researchers to examine Spi1b expression and localization in developing blood and immune cells. Such antibodies are essential for applications including western blot, immunohistochemistry, and immunofluorescence, enabling detailed characterization of hematopoietic cell populations. A Zebrafish Spi1b antibody can also be used to investigate transcriptional networks controlling immune development and to study the effects of genetic or chemical perturbations on blood cell formation.

There are no known isoforms of zebrafish Spi1b, and its expression is tightly regulated during embryogenesis and hematopoietic stem cell differentiation. Using a high-quality Zebrafish Spi1b antibody, researchers can gain insights into conserved mechanisms of immune regulation that are relevant to both zebrafish and humans.

Application Notes

Optimal dilution of the Zebrafish Spi1b antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Spi1b recombinant protein (amino acids M1-M297) was used as the immunogen for the Zebrafish Spi1b antibody.

Storage

After reconstitution, the Zebrafish Spi1b antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.