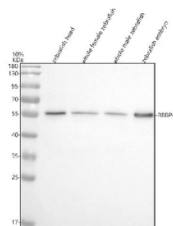


Zebrafish Rbbp4 Antibody / Retinoblastoma-binding protein 4 (RZ1301)

| Catalog No. | Formulation | Size |
|-------------|---|--------|
| RZ1301 | 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 | Q6P3H7 |
| Applications | Western Blot : 0.5-1ug/ml |
| Limitations | This Zebrafish Rbbp4 antibody is available for research use only. |



Western blot analysis of Rbbp4 protein using Zebrafish Rbbp4 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~48 kDa, commonly observed at 48-55 kDa. (human similarity)

Description

Zebrafish Rbbp4, also known as retinoblastoma binding protein 4, is a chromatin associated protein that plays a crucial role in regulating gene expression by modifying chromatin structure. It is a member of the WD40 repeat protein family and is involved in the assembly and function of multiple chromatin remodeling and histone deacetylase complexes. Rbbp4 contributes to nucleosome remodeling and histone modification, processes that are essential for transcriptional regulation, DNA replication, and cell cycle progression.

Zebrafish Rbbp4 is an ortholog of the human RBBP4 protein, with a high level of sequence and functional conservation. The protein interacts with histone H4 and serves as a core component of complexes such as the nucleosome remodeling

and deacetylase complex, also known as the NuRD complex. Through these interactions, Rbbp4 plays a vital role in controlling the accessibility of DNA for transcription factors and other regulatory proteins.

At present, there is no evidence of multiple isoforms of zebrafish Rbbp4 being identified, in contrast to some other chromatin associated proteins. Research on Rbbp4 in zebrafish provides insights into its roles during development, as chromatin remodeling is critical for processes such as cell differentiation, axis formation, and organ development.

Antibodies targeting zebrafish Rbbp4 protein are important tools for studies in epigenetic regulation, histone dynamics, and developmental biology. Given its orthology to human RBBP4, zebrafish Rbbp4 serves as a valuable model to study conserved mechanisms of chromatin remodeling and transcriptional regulation.

Application Notes

Optimal dilution of the Zebrafish Rbbp4 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Rbbp4 recombinant protein (amino acids E365-Q424) was used as the immunogen for the Zebrafish Rbbp4 antibody.

Storage

After reconstitution, the Zebrafish Rbbp4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.