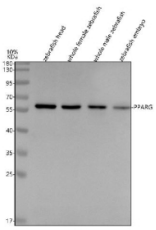
Zebrafish Ppar gamma Antibody / Pparg (RZ1276)

Catalog No.	Formulation	Size
RZ1276	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	A6XMH6
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Ppar gamma antibody is available for research use only.



Western blot analysis of Ppar gamma protein using Zebrafish Ppar gamma antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~60 kDa.

Description

Pparg (Peroxisome proliferator-activated receptor gamma) is a critical transcription factor that belongs to the nuclear receptor superfamily. It plays a vital role in regulating lipid metabolism, glucose homeostasis, inflammation, and adipocyte differentiation. As a ligand-activated transcription factor, Pparg regulates the expression of genes involved in a variety of physiological processes, including energy metabolism, insulin sensitivity, and immune response. Pparg is activated by fatty acids and other lipid metabolites, making it a key regulator of metabolic homeostasis.

In zebrafish, Pparg is an ortholog of the human PPARG gene. The zebrafish and human proteins share a high degree of sequence conservation, particularly in their DNA binding domain and ligand-binding domain, which are essential for their

function as transcription factors. This evolutionary conservation suggests that the role of Pparg in regulating lipid metabolism and adipogenesis is preserved across species, making zebrafish a valuable model for studying the molecular mechanisms of metabolic diseases and obesity.

Pparg in zebrafish has isoforms, which may exhibit tissue-specific expression and functional variation. The existence of isoforms allows for regulation of different target genes depending on developmental stages, tissue types, and environmental conditions. These isoforms may also be involved in regulating distinct physiological processes, such as fatty acid metabolism, inflammatory response, and immune cell differentiation.

In zebrafish, Pparg is expressed in various tissues, including the adipose tissue, liver, and muscles, as well as in developing embryos. Its expression is tightly regulated to ensure proper energy homeostasis and organ development. Pparg plays an essential role in early development, especially in regulating the formation of adipocytes (fat cells), which are important for long-term energy storage and regulation. Disruption of Pparg function in zebrafish can result in defects in lipid metabolism and adipogenesis, providing a model for studying metabolic disorders.

Application Notes

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

Immunogen

E. coli-derived zebrafish Ppar gamma recombinant protein (amino acids M1-D512) was used as the immunogen for the Zebrafish Ppar gamma antibody.

Storage

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