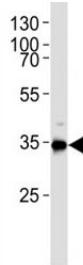


Zebrafish Gapdh Antibody (F52573)

Catalog No.	Formulation	Size
F52573-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F52573-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q5XJ10
Applications	Western Blot : 1:1000
Limitations	This Zebrafish Gapdh antibody is available for research use only.



Western blot analysis of lysate from HUVEC cell line using Gapdh antibody. Ab was diluted at 1:1000. Predicted molecular weight ~36kDa.

Description

GAPDH antibody is a valuable reagent for research using zebrafish models of development, metabolism, and disease. The target protein, glyceraldehyde 3 phosphate dehydrogenase (GAPDH), is a glycolytic enzyme that catalyzes the conversion of glyceraldehyde 3 phosphate to 1,3 bisphosphoglycerate, generating NADH as part of the glycolytic pathway. In zebrafish, GAPDH is abundantly expressed in most tissues and developmental stages, making it an essential housekeeping protein for normalization in molecular studies.

Because zebrafish are widely used in developmental biology, genetics, and drug discovery, GAPDH antibody detection

provides an important reference point for protein loading and expression studies. Consistent GAPDH levels across tissue types allow researchers to use it as an internal control in western blotting, immunohistochemistry, and immunofluorescence. This ensures accurate interpretation of experimental results and reproducibility across developmental and disease models.

Beyond its housekeeping role, zebrafish GAPDH also reflects evolutionary conservation of glycolytic enzymes. The structure and function of GAPDH are highly similar between zebrafish and mammals, underscoring its importance in comparative biology. This conservation ensures that findings from zebrafish studies are relevant and translatable to higher organisms, especially in the fields of energy metabolism and disease research.

In addition to its role in glycolysis, GAPDH participates in diverse cellular functions including apoptosis, nuclear transport, and stress response. Zebrafish models of neurodegeneration and oxidative stress demonstrate alterations in GAPDH activity, reinforcing its relevance in both metabolic and non metabolic pathways. Antibody based detection enables researchers to study these processes in detail, expanding understanding of GAPDH's multifunctional roles.

The GAPDH antibody is widely applied in zebrafish studies of metabolism, embryogenesis, and disease progression. It is useful for normalization in protein assays and for examining GAPDH's broader functions in development and stress biology. For scientists working with zebrafish as a model organism, the GAPDH antibody is a reliable and specific detection tool. NSJ Bioreagents provides validated antibodies that ensure reproducibility and precision across comparative and translational studies.

Application Notes

Titration of the Zebrafish Gapdh antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Gapdh antibody was produced from a rabbit immunized with a KLH conjugated synthetic peptide between 273-298 amino acids from the C-terminal region of zebrafish Gapdh.

Storage

Aliquot the Zebrafish Gapdh antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.