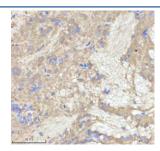


Zebrafish Npepps Antibody / Aminopeptidase (RZ1253)

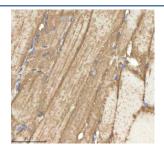
Catalog No.	Formulation	Size
RZ1253	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

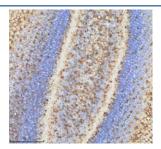
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	A0A8M1NSE3
Localization	Cytoplasmic, Nuclear
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Npepps antibody is available for research use only.



IHC staining of zebrafish Npepps protein using Zebrafish Npepps antibody, HRP-labeled secondary and DAB substrate. Npepps was detected in a paraffin-embedded section of zebrafish brain tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Npepps protein using Zebrafish Npepps antibody, HRP-labeled secondary and DAB substrate. Npepps was detected in a paraffin-embedded section of zebrafish muscle tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of zebrafish Npepps protein using Zebrafish Npepps antibody, HRP-labeled secondary and DAB substrate. Npepps was detected in a paraffin-embedded section of zebrafish eye tissue. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Npepps, or puromycin sensitive aminopeptidase, is a cytosolic metallopeptidase that plays an important role in protein turnover, peptide trimming, and the regulation of cellular responses to stress and inflammation. It belongs to the M1 family of aminopeptidases and functions by cleaving amino acids from the N terminus of peptides and small proteins.

In zebrafish, Npepps is broadly expressed during development and in adult tissues, with particularly strong expression in the brain, liver, and kidneys. Zebrafish Npepps is an ortholog of the human NPEPPS gene, and both proteins share conserved structural domains and enzymatic functions. The conservation between zebrafish and human Npepps supports its use as a model for studying the role of aminopeptidases in vertebrate biology.

Functionally, Npepps is involved in a variety of cellular processes, including neuropeptide metabolism, regulation of oxidative stress responses, and antigen presentation. It has also been implicated in the degradation of misfolded proteins and the clearance of damaged peptides, especially in the context of neurodegeneration and immune signaling. In zebrafish, knockdown or mutation of npepps can affect normal development, particularly in the central nervous system.

Because of its high degree of evolutionary conservation and functional importance in proteostasis, zebrafish Npepps is frequently studied in models of neurodevelopment, protein metabolism, and cellular stress. It is also used to investigate mechanisms of protein degradation that are relevant to human conditions such as Alzheimer disease, inflammation, and cancer.

Application Notes

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

Immunogen

E. coli-derived zebrafish Npepps recombinant protein (amino acids R487-A851) was used as the immunogen for the Zebrafish Npepps antibody.

Storage

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