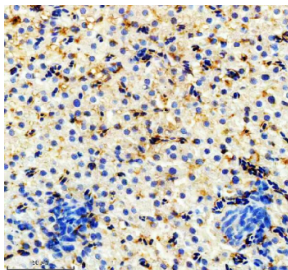


Zebrafish Hmox1a Antibody / Hmox1 / Heme oxygenase (RZ1193)

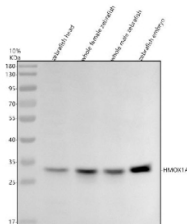
Catalog No.	Formulation	Size
RZ1193	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

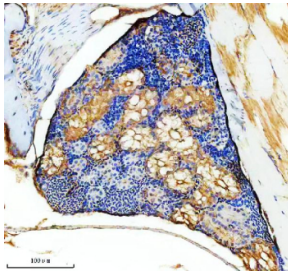
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	B0UXS0
Localization	Cytoplasm (ER)
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Hmox1a antibody is available for research use only.



IHC staining of FFPE zebrafish liver tissue with Zebrafish Hmox1a antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Hmox1a protein using Zebrafish Hmox1a antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~30 kDa.



IHC staining of FFPE zebrafish kidney tissue with Zebrafish Hmox1a antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Heme oxygenase 1a (Hmox1a) is one of the zebrafish homologs of the mammalian heme oxygenase 1 (HMOX1), an essential enzyme that catalyzes the degradation of heme into biliverdin, free iron, and carbon monoxide. In zebrafish (*Danio rerio*), Hmox1a plays a critical role in oxidative stress response, iron homeostasis, and anti-inflammatory signaling, and is a key marker of cellular stress.

Hmox1a is inducible under a variety of stress conditions, including oxidative damage, hypoxia, heavy metal exposure, and inflammation. Its expression is regulated by transcription factors such as Nrf2 and Bach1. Zebrafish hmox1a is highly conserved and is expressed in multiple tissues including the liver, kidney, and vasculature, especially under stress or injury.

Zebrafish provide a powerful *in vivo* model for studying Hmox1a function in developmental biology, toxicology, inflammation, and iron metabolism. Because of its conservation with mammalian HMOX1, hmox1a is widely used in research on antioxidant defense, redox signaling, and as a readout for environmental and pharmaceutical stress responses.

Application Notes

Optimal dilution of the Zebrafish Hmox1a antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Hmox1a recombinant protein (amino acids M1-K244) was used as the immunogen for the Zebrafish Hmox1a antibody.

Storage

After reconstitution, the Zebrafish Hmox1a antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.