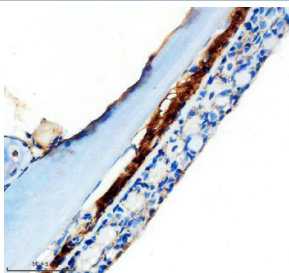


## Zebrafish Mmp13a Antibody / Interstitial collagenase (RZ1189)

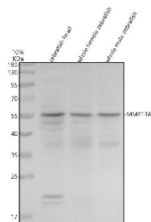
Catalog No.	Formulation	Size
RZ1189	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

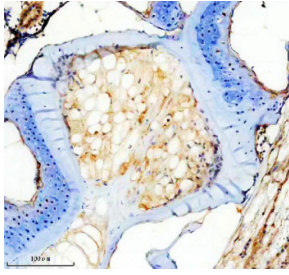
<b>Availability</b>	2-3 weeks
<b>Species Reactivity</b>	Zebrafish
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Antigen affinity chromatography
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	F1QCX8
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
<b>Limitations</b>	This Zebrafish Mmp13a antibody is available for research use only.



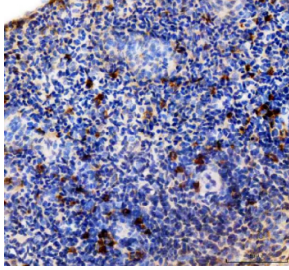
IHC staining of FFPE zebrafish skin tissue with Zebrafish Mmp13a antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Mmp13a protein using Zebrafish Mmp13a antibody and 1) zebrafish head, 2) whole female zebrafish and 3) whole male zebrafish tissue lysate. Predicted molecular weight ~54 kDa.



IHC staining of FFPE zebrafish spinal column tissue with Zebrafish Mmp13a antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE zebrafish spleen tissue with Zebrafish Mmp13a antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

Matrix metalloproteinase 13a (Mmp13a) is a member of the matrix metalloproteinase (MMP) family, enzymes that degrade components of the extracellular matrix (ECM). In zebrafish (*Danio rerio*), Mmp13a plays a pivotal role in tissue remodeling, skeletal development, and regeneration by regulating collagen breakdown and ECM turnover.

Mmp13a is particularly important during craniofacial morphogenesis, bone formation, and fin regeneration, where precise ECM remodeling is essential for cell migration, differentiation, and structural reorganization. Its expression is tightly regulated by signaling pathways such as Wnt, FGF, and TGF- $\beta^2$ , and it can be induced in response to injury or developmental cues.

Due to its functional conservation with mammalian MMP13, zebrafish Mmp13a serves as a valuable model for studying osteogenesis, fibrosis, wound healing, and ECM-related diseases, including arthritis and cancer metastasis. Its robust expression during regeneration also makes it a useful biomarker for studies of tissue repair and regenerative biology.

## Application Notes

Optimal dilution of the Zebrafish Mmp13a antibody should be determined by the researcher.

## Immunogen

*E. coli*-derived zebrafish Mmp13a recombinant protein (amino acids D110-K476) was used as the immunogen for the Zebrafish Mmp13a antibody.

## Storage

After reconstitution, the Zebrafish Mmp13a 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.

