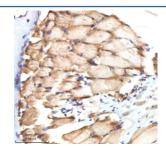


Zebrafish Bmp2b Antibody / Bone morphogenetic protein 2 (RZ1207)

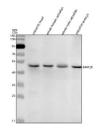
Catalog No.	Formulation	Size
RZ1207	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

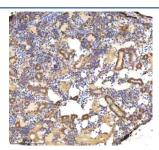
Availability	2-3 weeks
Species Reactivity	Zebrafish
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O93369
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Bmp2b antibody is available for research use only.



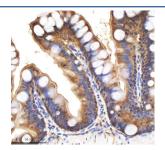
IHC staining of FFPE zebrafish muscle tissue with Zebrafish Bmp2b antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



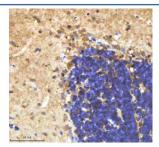
Western blot analysis of Bmp2b protein using Zebrafish Bmp2b antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~47 kDa.



IHC staining of FFPE zebrafish kidney tissue with Zebrafish Bmp2b 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 colon tissue with Zebrafish Bmp2b 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 cerebellum tissue with Zebrafish Bmp2b antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Bone morphogenetic protein 2b (Bmp2b) is a secreted signaling molecule belonging to the transforming growth factor-beta (TGF-beta) superfamily, and it plays a pivotal role in embryonic development, cell fate specification, and morphogenesis. In zebrafish (Danio rerio), Bmp2b is an essential factor in dorsoventral patterning, organogenesis, and skeletal development.

During early embryogenesis, bmp2b is expressed in ventral tissues and functions as a key morphogen that establishes dorsoventral polarity by forming a signaling gradient. Loss-of-function mutations in bmp2b, such as the well-known swirl mutant, result in dorsalized embryos, underscoring its essential role in ventral tissue specification. Bmp2b also regulates the development of multiple organ systems, including the heart, fins, and skeletal elements, through its influence on proliferation, differentiation, and apoptosis of progenitor cells.

Zebrafish Bmp2b is widely studied as a model for developmental signaling, stem cell biology, and tissue regeneration. It also provides a powerful system for investigating TGF-beta pathway modulation, signal transduction, and congenital malformations resulting from disrupted BMP signaling.

Application Notes

Optimal dilution of the Zebrafish Bmp2b antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Bmp2b recombinant protein (amino acids E27-D279) was used as the immunogen for the Zebrafish Bmp2b antibody.

Storage After reconstitution, the Zebrafish Bmp2b antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.