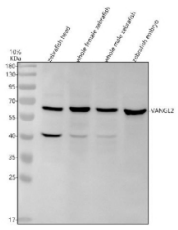
Zebrafish Vangl2 Antibody / Vang-like protein 2 (RZ1196)

Catalog No.	Formulation	Size
RZ1196	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

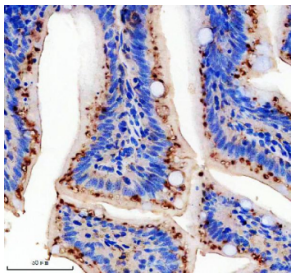
Bulk quote request

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	Q8UVJ6
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Zebrafish Vangl2 antibody is available for research use only.

IHC staining of FFPE zebrafish skin tissue with Zebrafish Vangl2 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 Vangl2 protein using Zebrafish Vangl2 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~60 kDa.



IHC staining of FFPE zebrafish colon tissue with Zebrafish Vangl2 antibody, HRP-labeled secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Van Gogh-like protein 2 (Vangl2) is a core component of the planar cell polarity (PCP) pathway, a non-canonical Wnt signaling pathway that regulates the orientation and coordinated movement of cells within the plane of a tissue. In zebrafish (Danio rerio), Vangl2 plays a vital role in embryonic morphogenesis, particularly in convergent extension movements during gastrulation, which are essential for body axis elongation.

Zebrafish vangl2 is expressed early in development and is critical for establishing tissue polarity and directional cell migration. Mutations in vangl2Ã¢Â€Â”such as the well-studied trilobite mutantÃ¢Â€Â”lead to severe defects in neural tube formation, somite patterning, and organ positioning, making it a key model for understanding PCP signaling in vertebrates.

Given its high conservation and pivotal role in developmental processes, zebrafish Vangl2 is widely used to study cell polarity, tissue architecture, and congenital disorders such as neural tube defects. It also provides valuable insights into cytoskeletal organization, cell-cell communication, and signal integration during vertebrate development.

Application Notes

Optimal dilution of the Zebrafish Vangl2 antibody should be determined by the researcher.

Immunogen

E. coli-derived zebrafish Vangl2 recombinant protein (amino acids M1-D489) was used as the immunogen for the Zebrafish Vangl2 antibody.

Storage

After reconstitution, the Zebrafish Vangl2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.