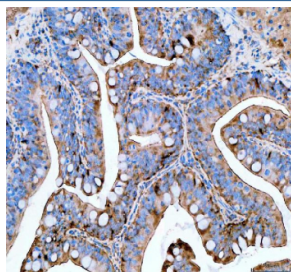


Zebrafish Psmc4 Antibody / 26S proteasome regulatory subunit 6B (RZ1168)

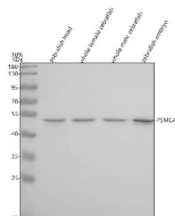
Catalog No.	Formulation	Size
RZ1168	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[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	B0R1D0
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1 ug/ml Immunohistochemistry (FFPE) : 2-5 ug/ml
Limitations	This Zebrafish Psmc4 antibody is available for research use only.



IHC staining of FFPE zebrafish colon tissue with Zebrafish Psmc4 antibody, HRP secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot analysis of Psmc4 protein using Zebrafish Psmc4 antibody and 1) zebrafish head, 2) whole female zebrafish, 3) whole male zebrafish and 4) zebrafish embryo tissue lysate. Predicted molecular weight ~47 kDa.

Description

PSMC4 (Proteasome 26S Subunit, ATPase 4), also known as Rpt3, is an essential component of the 19S regulatory particle of the 26S proteasome, a multi-subunit complex responsible for ATP-dependent degradation of ubiquitinated proteins. In zebrafish (*Danio rerio*), Psmc4 is highly conserved and serves a critical role in maintaining cellular protein homeostasis by regulating the degradation of misfolded, damaged, or regulatory proteins.

PSMC4 is one of six AAA+ ATPases (Rpt1–Rpt6) that form a hexameric ring within the base of the 19S proteasome regulatory particle. This ATPase activity is required for substrate unfolding and translocation into the 20S core particle for proteolysis. In zebrafish, psmc4 is expressed ubiquitously, with elevated expression in rapidly dividing and metabolically active tissues, underscoring its involvement in cell cycle regulation, signal transduction, and stress responses.

Functional analyses in zebrafish models have demonstrated that disruption of psmc4 leads to proteasome dysfunction, accumulation of ubiquitinated proteins, and developmental abnormalities. Because of its central role in protein degradation, zebrafish PSMC4 is a valuable target for studying proteostasis, neurodegenerative disease mechanisms, and the effects of proteasome inhibitors *in vivo*.

Application Notes

Optimal dilution of the Zebrafish Psmc4 antibody should be determined by the researcher.

Immunogen

An E.coli-derived zebrafish Psmc4 recombinant protein (amino acids M1-D410) was used as the immunogen for the Zebrafish Psmc4 antibody.

Storage

After reconstitution, the Zebrafish Psmc4 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.