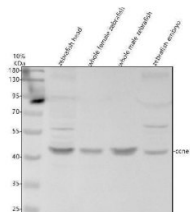


Zebrafish Cyclin E1 Antibody / CCNE1 Antibody (RZ1362)

Catalog No.	Formulation	Size
RZ1362	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Species Reactivity	Zebrafish
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Lyophilized from a buffered saline solution containing 2% trehalose. Reconstitute with 0.2 mL distilled water to yield a final antibody concentration of 500 ug/ml.
UniProt	P47794
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Zebrafish Cyclin E1 Antibody / CCNE1 Antibody is available for research use only.



Zebrafish Cyclin E1 / CCNE1 Antibody Cell Cycle WB. Western blot analysis of zebrafish head tissue, whole female zebrafish, whole male zebrafish, and zebrafish embryo lysates using Zebrafish Cyclin E1 Antibody demonstrates a prominent immunoreactive band at approximately 46 kDa, consistent with the predicted molecular weight of Cyclin E1 (CCNE1). Cyclin E1 is a key regulator of G1/S cell cycle progression that functions through activation of CDK2 to promote DNA replication and cellular proliferation. The observed expression across multiple zebrafish tissue preparations, including embryonic tissue, is consistent with the established role of CCNE1 in developmental growth, tissue expansion, and regulation of cell cycle progression. Minor higher molecular weight immunoreactive bands are present in some samples and may represent post-translationally modified forms, protein complexes, or other antibody-reactive species. Electrophoresis was performed on a 10% SDS-PAGE gel under reducing conditions followed by transfer to a nitrocellulose membrane. Signal was detected using an HRP-conjugated secondary antibody and enhanced chemiluminescent substrate.

Description

Zebrafish Cyclin E1 Antibody / CCNE1 Antibody recognizes Cyclin E1 (CCNE1), a cell cycle regulatory protein that plays a critical role in controlling progression through the G1/S transition. Cyclin E1 functions by forming active kinase complexes with cyclin-dependent kinase 2 (CDK2), thereby promoting DNA replication and cell cycle progression.

Through regulation of cellular proliferation, Cyclin E1 contributes to embryonic development, tissue growth, organ formation, and maintenance of normal cellular homeostasis. The highly conserved nature of cell cycle control pathways has established zebrafish as an important vertebrate model for investigating CCNE1 function and proliferative regulation.

Cell cycle progression must be tightly controlled during development to ensure proper tissue formation and organismal growth. Cyclin E1 serves as a key regulator of the transition from G1 phase into S phase, where DNA replication occurs. In zebrafish, CCNE1 expression is frequently examined in studies investigating embryogenesis, developmental growth, tissue regeneration, stem cell biology, and proliferative signaling pathways. Because cellular proliferation underlies many developmental processes, Cyclin E1 remains an important marker of actively dividing cell populations.

Beyond its developmental role, Cyclin E1 contributes to regulation of cell fate decisions, tissue maintenance, and responses to growth-promoting signals. Alterations in Cyclin E1 expression or activity can affect cell cycle progression and cellular proliferation, making CCNE1 an important target in studies of growth regulation and developmental signaling. Researchers commonly evaluate CCNE1 expression in the context of cell cycle biology, proliferation, regenerative processes, and developmental genetics.

Zebrafish provide unique advantages for studying cell cycle regulation because developmental growth can be observed directly in living embryos and larval stages. Investigators frequently monitor CCNE1 expression during studies of embryonic patterning, organogenesis, regeneration, developmental toxicology, and stem cell activity. Because cell cycle regulatory pathways are highly conserved between zebrafish and mammals, findings generated using zebrafish models often provide valuable insight into vertebrate developmental biology and proliferative control mechanisms.

At NSJ Bioreagents, we provide highly validated antibodies for cell biology, developmental biology, stem cell research, and zebrafish research. Zebrafish Cyclin E1 Antibody / CCNE1 Antibody targets a key regulator of G1/S cell cycle progression and cellular proliferation. CCNE1 expression is widely studied in the context of cell cycle regulation, developmental growth, tissue regeneration, embryogenesis, and vertebrate development. Continued investigation of this important cyclin is expanding our understanding of the molecular mechanisms that govern cellular proliferation and developmental homeostasis.

Explore our [Cyclin E1 Antibody / G1-S Cell Cycle Regulator Antibody](#) page for additional validation data and applications involving cell cycle progression, DNA replication, and cellular proliferation.

This Zebrafish antibody is part of a [broader Zebrafish / Danio rerio antibody panel](#) offered by NSJ Bioreagents.

Application Notes

The optimal working dilution of the Zebrafish Cyclin E1 Antibody / CCNE1 Antibody should be determined empirically by the investigator.

Immunogen

An E.coli-derived Zebrafish Cyclin E1/CCNE1 recombinant protein (amino acids M1-S389) was used as the immunogen for the Zebrafish Cyclin E1 / CCNE1 Antibody.

Storage

After reconstitution, the Zebrafish Cyclin E1 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Zebrafish CCNE1 Antibody, Zebrafish G1/S Cyclin Antibody, Zebrafish Cell Cycle Regulatory Protein Antibody, Zebrafish Cell Cycle Progression Marker Antibody, Zebrafish Cyclin Family Protein Antibody, Zebrafish Proliferation Regulatory Protein Antibody

