

ZWINT Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2010b

Specification

ZWINT Antibody - Product Information

Application	WB,E
Primary Accession	O95229
Other Accession	NP_001005413.1 , NP_008988.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Calculated MW	31293

ZWINT Antibody - Additional Information

Gene ID 11130

Other Names

ZW10 interactor, ZW10-interacting protein 1, Zwint-1, ZWINT

Target/Specificity

Purified His-tagged ZWINT protein(Fragment) was used to produced this monoclonal antibody.

Dilution

WB~~1:500~1000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ZWINT Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ZWINT Antibody - Protein Information

Name ZWINT

Function Acts as a component of the outer kinetochore KNL1 complex that serves as a docking point for spindle assembly checkpoint components and mediates microtubule-kinetochore interactions (PubMed:[15094189](#), PubMed:[15485811](#), PubMed:[15824131](#), PubMed:[16732327](#), PubMed:[24530301](#), PubMed:[27881301](#), PubMed:[38459127](#), PubMed:[38459128](#)). Kinetochores, consisting of a centromere-associated inner segment and a microtubule-contacting outer segment,

play a crucial role in chromosome segregation by mediating the physical connection between centromeric DNA and spindle microtubules (PubMed:[15094189](#), PubMed:[15485811](#), PubMed:[16732327](#)). The outer kinetochore is made up of the ten-subunit KMN network, comprising the MIS12, NDC80 and KNL1 complexes, and auxiliary microtubule-associated components; together they connect the outer kinetochore with the inner kinetochore, bind microtubules, and mediate interactions with mitotic checkpoint proteins that delay anaphase until chromosomes are bioriented on the spindle (PubMed:[15094189](#), PubMed:[15485811](#), PubMed:[15824131](#), PubMed:[16732327](#), PubMed:[24530301](#), PubMed:[38459127](#), PubMed:[38459128](#)). Targets the RZZ complex to the kinetochore at prometaphase (PubMed:[15485811](#)). Recruits MAD2L1 to the kinetochore, but is not required for BUB1B localization (By similarity). In addition to orienting mitotic chromosomes, it is also essential for alignment of homologous chromosomes during meiotic metaphase I (By similarity). In meiosis I, required to activate the spindle assembly checkpoint at unattached kinetochores to correct erroneous kinetochore-microtubule attachments (PubMed:[15485811](#)).

Cellular Location

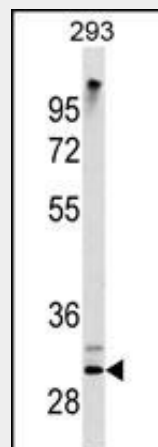
Nucleus. Chromosome, centromere, kinetochore Note=Localizes to kinetochores from late prophase to anaphase (PubMed:[15502821](#), PubMed:[27881301](#)). Localizes to kinetochores both during mitosis and meiosis (By similarity) {ECO:0000250|UniProtKB:Q9CQU5, ECO:0000269|PubMed:[15502821](#), ECO:0000269|PubMed:[27881301](#)}

ZWINT Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ZWINT Antibody - Images



ZWINT Antibody (Cat. #AM2010b) western blot analysis in 293 cell line lysates (35µg/lane). This demonstrates the ZWINT antibody detected the ZWINT protein (arrow).

ZWINT Antibody - Background

This gene encodes a protein that is clearly involved in kinetochore function although an exact role is not known. It interacts with ZW10, another kinetochore protein, possibly regulating the association between ZW10 and kinetochores. The encoded protein localizes to prophase kinetochores before ZW10 does and it remains detectable on the kinetochore until late anaphase. It has a uniform distribution in the cytoplasm of interphase cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

ZWINT Antibody - References

Brendle, A., et al. Eur. J. Cancer 45(3):435-442(2009)
Famulski, J.K., et al. J. Cell Biol. 180(3):507-520(2008)
Morgan, A.R., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 144B (6), 762-770 (2007) :
Lin, Y.T., et al. Oncogene 25(52):6901-6914(2006)
Kops, G.J., et al. J. Cell Biol. 169(1):49-60(2005)