

**Anti-ZWINT Picoband Antibody**  
**Catalog # ABO11636****Specification**

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**Anti-ZWINT Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O95229</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for ZW10 interactor(ZWINT) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-ZWINT Picoband Antibody - Additional Information**

**Gene ID** 11130

**Other Names**

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

**Calculated MW**

31293 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Subcellular Localization**

Nucleus. Chromosome, centromere, kinetochore. Localizes to kinetochores from late prophase to anaphase.

**Protein Name**

ZW10 interactor

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

E.coli-derived human ZWINT recombinant protein (Position: Q29-Q249). Human ZWINT shares 58% and 57.1% amino acid (aa) sequence identity with mouse and rat ZWINT, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Anti-ZWINT Picoband 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:<a href="http://www.uniprot.org/citations/15094189" target="\_blank">15094189</a>, PubMed:<a href="http://www.uniprot.org/citations/15485811" target="\_blank">15485811</a>, PubMed:<a href="http://www.uniprot.org/citations/15824131" target="\_blank">15824131</a>, PubMed:<a href="http://www.uniprot.org/citations/16732327" target="\_blank">16732327</a>, PubMed:<a href="http://www.uniprot.org/citations/24530301" target="\_blank">24530301</a>, PubMed:<a href="http://www.uniprot.org/citations/27881301" target="\_blank">27881301</a>, PubMed:<a href="http://www.uniprot.org/citations/38459127" target="\_blank">38459127</a>, PubMed:<a href="http://www.uniprot.org/citations/38459128" target="\_blank">38459128</a>). Kinetochore, 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:<a href="http://www.uniprot.org/citations/15094189" target="\_blank">15094189</a>, PubMed:<a href="http://www.uniprot.org/citations/15485811" target="\_blank">15485811</a>, PubMed:<a href="http://www.uniprot.org/citations/16732327" target="\_blank">16732327</a>). 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:<a href="http://www.uniprot.org/citations/15094189" target="\_blank">15094189</a>, PubMed:<a href="http://www.uniprot.org/citations/15485811" target="\_blank">15485811</a>, PubMed:<a href="http://www.uniprot.org/citations/15824131" target="\_blank">15824131</a>, PubMed:<a href="http://www.uniprot.org/citations/16732327" target="\_blank">16732327</a>, PubMed:<a href="http://www.uniprot.org/citations/24530301" target="\_blank">24530301</a>, PubMed:<a href="http://www.uniprot.org/citations/38459127" target="\_blank">38459127</a>, PubMed:<a href="http://www.uniprot.org/citations/38459128" target="\_blank">38459128</a>). Targets the RZZ complex to the kinetochore at prometaphase (PubMed:<a href="http://www.uniprot.org/citations/15485811" target="\_blank">15485811</a>). 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:<a href="http://www.uniprot.org/citations/15485811" target="\_blank">15485811</a>).

**Cellular Location**

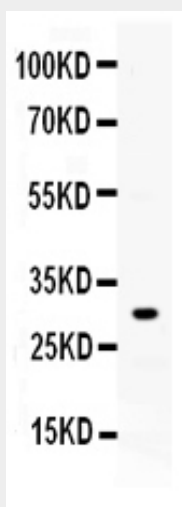
Nucleus. Chromosome, centromere, kinetochore Note=Localizes to kinetochores from late prophase to anaphase (PubMed:15502821, PubMed:27881301). Localizes to kinetochores both during mitosis and meiosis (By similarity) {ECO:0000250|UniProtKB:Q9CQU5, ECO:0000269|PubMed:15502821, ECO:0000269|PubMed:27881301}

## Anti-ZWINT Picoband Antibody - Protocols

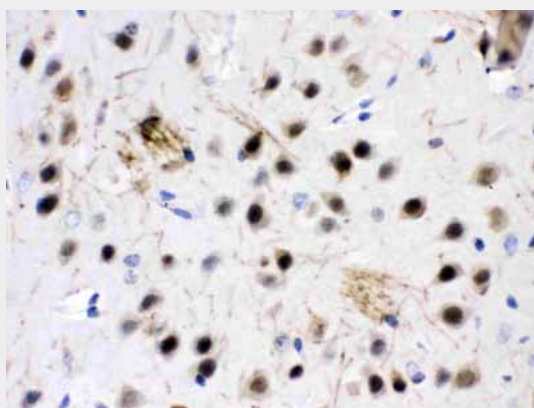
Provided below are standard protocols that you may find useful for product applications.

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

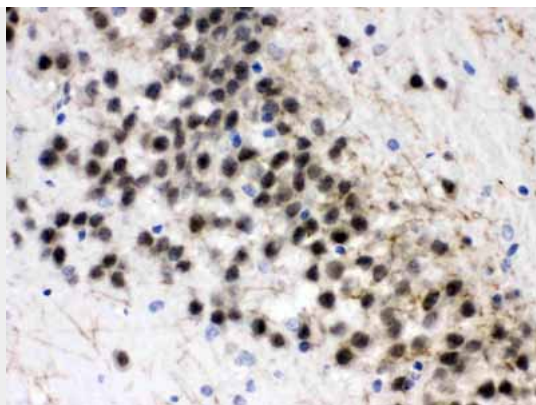
## Anti-ZWINT Picoband Antibody - Images



Western blot analysis of ZWINT expression in rat skeletal muscle extract (lane 1). ZWINT at 31KD was detected using rabbit anti- ZWINT Antigen Affinity purified polyclonal antibody (Catalog # ABO11636) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



ZWINT was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti-ZWINT Antigen Affinity purified polyclonal antibody (Catalog # ABO11636) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



ZWINT was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- ZWINT Antigen Affinity purified polyclonal antibody (Catalog # ABO11636) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-ZWINT Picoband Antibody - Background**

ZW10 interactor (Zwint-1) is a protein that in humans is encoded by the ZWINT gene. 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.