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Anti-ZWINT Picoband Antibody

Catalog # ABO11636

Product Information

Application	WB, IHC-P
Primary Accession	O95229
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.

Additional Information

Gene ID	11130
Other Names	ZW10 interactor, ZW10-interacting protein 1, Zwint-1, ZWINT
Calculated MW	31293
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Nucleus. Chromosome, centromere, kinetochore. Localizes to kinetochores from late prophase to anaphase.
Source	Eukaryota
Protein Name	ZW10 interactor
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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.

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}

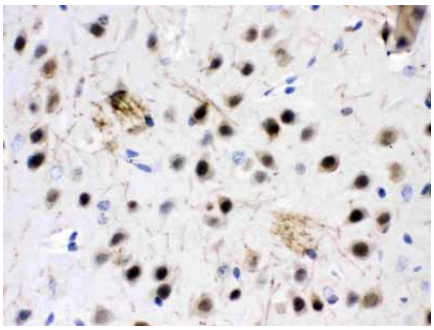
Background

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.

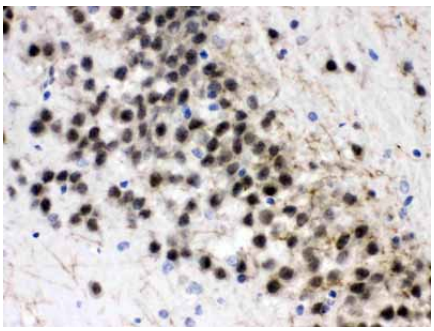
Images

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 ??g/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 □¼g/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 □¼g/mL. The immunohistochemical section was developed using SABC method .

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