# **Anti-ZW10 Antibody [PSH05-80]**

### **HA722479**



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat, Monkey

Applications: WB, IHC-P

Molecular Wt: Predicted band size: 89 kDa

Clone number: PSH05-80

**Description:** Essential component of the mitotic checkpoint, which prevents cells from prematurely exiting

mitosis. Required for the assembly of the dynein-dynactin and MAD1-MAD2 complexes onto kinetochores. Its function related to the spindle assembly machinery is proposed to depend on its association in the mitotic RZZ complex. Involved in regulation of membrane traffic between the Golgi and the endoplasmic reticulum (ER); the function is proposed to depend on its association in the interphase NRZ complex which is believed to play a role in SNARE assembly at the ER. Overexpression as well as silencing of ZW10 disrupts the morphology of the ER-Golgi intermediate compartment as well as the Golgi apparatus and slows down

ER-Golgi transport.

**Immunogen:** Recombinant protein within Human ZW10 aa 350-779.

Positive control: Jurkat cell lysate, K-562 cell lysate, Ramos cell lysate, U-2 OS cell lysate, HCT 116 cell

lysate, SW620 cell lysate, HeLa cell lysate, COS-1 cell lysate, NIH/3T3 cell lysate, C6 cell

lysate, PC-12 cell lysate, human testis tissue, mouse testis tissue, rat testis tissue.

Subcellular location: Centromere, Chromosome, Cytoplasm, Cytoskeleton, Endoplasmic reticulum.

Database links: SwissProt: O43264 Human | O54692 Mouse | Q4V8C2 Rat

**Recommended Dilutions:** 

**WB** 1:2,000 **IHC-P** 1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into

single-use upon delivery. Store at -20 °C long term.

**Purity:** Protein A affinity purified.

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#### **Images**

 **Fig1:** Western blot analysis of ZW10 on different lysates with Rabbit anti-ZW10 antibody (HA722479) at 1/2,000 dilution and competitor's antibody at 1/2,000 dilution.

Lane 1: Jurkat cell lysate
Lane 2: K-562 cell lysate
Lane 3: Ramos cell lysate
Lane 4: U-2 OS cell lysate
Lane 5: HCT 116 cell lysate
Lane 6: SW620 cell lysate
Lane 7: HeLa cell lysate
Lane 8: COS-1 cell lysate
Lane 9: NIH/3T3 cell lysate
Lane 10: C6 cell lysate
Lane 11: PC-12 cell lysate

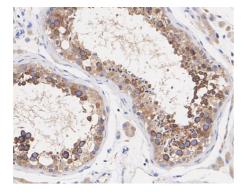
Lysates/proteins at 20 µg/Lane.

Predicted band size: 89 kDa Observed band size: 89 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722479) at 1/2,000 dilution and competitor's antibody at 1/2,000 dilution were used in 5% NFDM/TBST at  $4\,^{\circ}\mathrm{C}$  overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

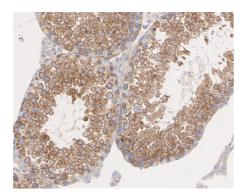


**Fig2:** Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-ZW10 antibody (HA722479) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH $_2$ O and PBS, and then probed with the primary antibody (HA722479) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

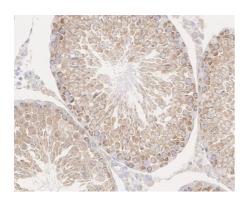
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**Fig3:** Immunohistochemical analysis of paraffin-embedded mouse testis tissue with Rabbit anti-ZW10 antibody (HA722479) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH $_2$ O and PBS, and then probed with the primary antibody (HA722479) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig4:** Immunohistochemical analysis of paraffin-embedded rat testis tissue with Rabbit anti-ZW10 antibody (HA722479) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722479) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Hirose H., Arasaki K., Dohmae N., Takio K., Hatsuzawa K., Nagahama M., Tani K., Yamamoto A., Tohyama M., Tagaya M. Implication of ZW10 in membrane trafficking between the endoplasmic reticulum and Golgi. EMBO J. 23:1267-1278 (2004)
- 2. Scaeerou F., Starr D.A., Piano F., Papoulas O., Karess R.E., Goldberg M.L. The ZW10 and Rough Deal checkpoint proteins function together in a large, evolutionarily conserved complex targeted to the kinetochore. J. Cell Sci. 114:3103-3114 (2001)

