Anti-CENPC Antibody [JG36-15]

ET7108-24

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 107 kDa
Clone number:	JG36-15

Description: A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. The evolutionarily conserved Centromere Protein-C, CENP-C, is a kinetochore assembly protein. CENP-C is located on the fibers of the kinetochore and constitutes a kinetochore organizing center that tightly associates with DNA. CENP-C is necessary for the formation of a functional centromere, which indicates that CENP-C is important for mitotic progression. In addition, CENP-C is lost from centromeres during herpes simplex virus 1 infection, causing substantial structural changes in the kinetochore, which suggests that the structure of CENP-C is regulated during the cell cycle.

Immunogen: Recombinant protein within Human CENPC aa 360-540 / 943.

Positive control: Daudi cell lysate, HL-60 cell lysate, NIH/3T3 cell lysate, C2C12 cell lysate, mouse spleen tissue, rat spleen tissue.

Subcellular location: Nucleus, kinetochore, centromere.

Database links: SwissProt: Q03188 Human | P49452 Mouse
Entrez Gene: 305270 Rat

Recommended Dilutions:

WB	1:500-1:2,000
IHC-P	1:50

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

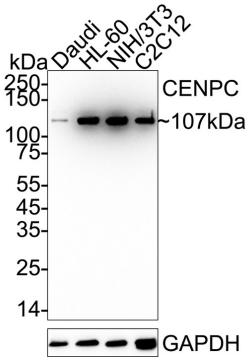

Fig1: Western blot analysis of CENPC on different lysates with Rabbit anti-CENPC antibody (ET7108-24) at 1/1,000 dilution.

Lane 1: Daudi cell lysate (20 µg/Lane)
Lane 2: HL-60 cell lysate (20 µg/Lane)
Lane 3: NIH/3T3 cell lysate (20 µg/Lane)
Lane 4: C2C12 cell lysate (20 µg/Lane)

Predicted band size: 107 kDa
Observed band size: 107 kDa

Exposure time: 1 minute; 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 (ET7108-24) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

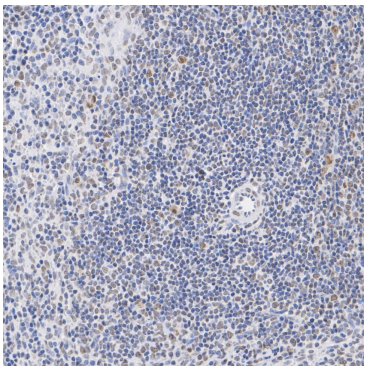

Fig2: Immunohistochemical analysis of paraffin-embedded mouse spleen tissue with Rabbit anti-CENPC antibody (ET7108-24) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7108-24) at 1/50 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.

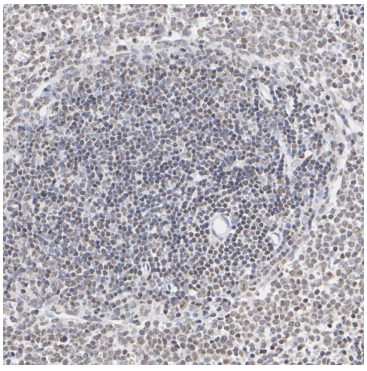

Fig3: Immunohistochemical analysis of paraffin-embedded rat spleen tissue with Rabbit anti-CENPC antibody (ET7108-24) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7108-24) at 1/50 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.

Background References

1. Gopalakrishnan S et al. DNMT3B interacts with constitutive centromere protein CENP-C to modulate DNA methylation and the histone code at centromeric regions. Hum Mol Genet 18:3178-3193 (2009).
2. Gascoigne K E et al. Induced ectopic kinetochore assembly bypasses the requirement for CENP-A nucleosomes. Cell 145:410-422 (2011).