

CENPO Antibody

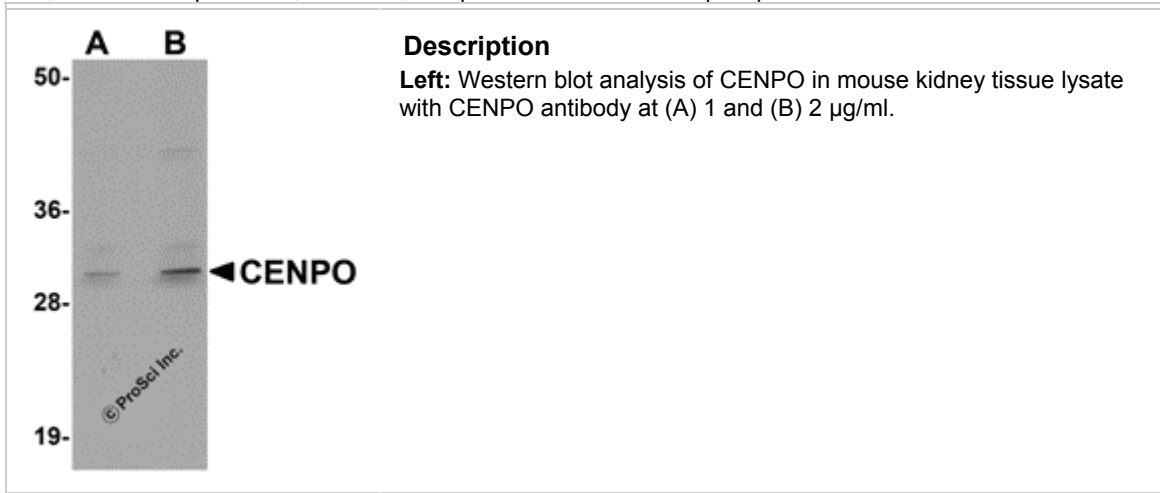
HOM-5433

Background

Accurate chromosome segregation during mitosis requires a kinetochore to assemble correctly at the centromere of each chromatid and form a dynamic interface with the microtubules of the mitotic spindle. The kinetochore assembly includes the multisubunit CENP-H/I complex which can be divided into three functional classes based on phenotype analysis. One of these classes is referred to as the CENP-O class of proteins of which CENPO is the exemplar. These proteins form a stable complex with each other and are required for proper kinetochore function and for recovery from mitotic spindle damage. CENPO has also been shown to be an auto-antigen in a small population of anti-centromere antibodies- (ACA-) positive patients with scleroderma.

Additional Names

CENPO, Centromere protein O, CENP-O, interphase centromere complex protein 36



Source

CENPO antibody was raised against a 16 amino acid peptide from near the center of human CENPO.

Purification

Affinity chromatography purified via peptide column

Clonality / Clone

This is a polyclonal antibody.

Host

CENPO antibody was raised in rabbit.

Please use anti-rabbit secondary antibodies.

Application

CENPO antibody can be used for detection of CENPO by Western blot at 1 - 2 $\mu\text{g}/\text{ml}$.

Tested Application

E, WB

Buffer

Antibody is supplied in PBS containing 0.02% sodium azide.

Blocking Peptide

CENPO Peptide (contact Zyagen for availability)

Storage

CENPO antibody can be stored at 4°C, stable for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Positive Control

Mouse Kidney Tissue Lysate (contact Zyagen for availability)

Species Reactivity

H, M, R

Protein GI Number

13236565

Protein Accession Number

NP_077298

Short Description

Centromere protein O

References

1. Fukagawa T. Assembly of kinetochore in vertebrate cells. *Exp. Cell Res.* 2004; 296:21-7.
2. Okada M, Cheeseman IM, Hori T, et al. The CENP-H-I complex is required for the efficient incorporation of newly synthesized CENP-A into centromeres. *Nat. Cell Biol.* 2006; 8:446-57.
3. Hori T, Okada M, Maenaka K, et al. CENP-O class proteins form a stable complex and are required for proper kinetochore function. *Mol. Biol. Cell* 2008; 19:843-54.
4. Saito A, Muro Y, Sugiura K, et al. CENP-O, a protein localized at the centromere throughout the cell cycle, is a novel target antigen in systemic sclerosis. *J. Rheumatol.* 2009; 36:781-6.