



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

CENP-A (m): 293T Lysate: sc-119162

BACKGROUND

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. Centromere protein-A (CENP-A) is a Histone H3-like protein that contains a C-terminal H3-like domain, required for centromere localization of CENP-A, and an antigenic N-terminal domain. CENP-A, originally isolated from HeLa cells, is essential for kinetochore targeting of CENP-C. In the presence of DNA, CENP-A forms an octameric complex with Histones H4, H2A and H2B. CENP-A specifically localizes to active centromeres and is a component of specialized centromeric nucleosomes, on which kinetochores are assembled. CENP-A is essential for nucleosomal packaging of centromeric DNA at interphase and functions as a centromere formation marker on the chromosome.

REFERENCES

1. Rieder, C.L. and Salmon, E.D. 1998. The vertebrate cell kinetochore and its roles during mitosis. *Trends Cell Biol.* 8: 310-318.
2. Choo, K.H. 2000. Centromerization. *Trends Cell Biol.* 10: 182-188.
3. Muro, Y., Axuma, N., Onouchi, H., Kunimatsu, M., Tomita, Y., Sasaki, M. and Sugimoto, K. 2000. Autoepitopes on autoantigen centromere protein-A (CENP-A) are restricted to the N-terminal region, which has no homology with Histone H3. *Clin. Exp. Immunol.* 120: 218-223.
4. Howman, E.V., Fowler, K.J., Newson, A.J., Redward, S., MacDonald, A.C., Kalitsis, P. and Choo, K.H. 2000. Early disruption of centromeric chromatin organization in centromere protein-A (CENP-A) null mice. *Proc. Natl. Acad. Sci. USA* 97: 1148-1153.
5. Yoda, K., Ando, S., Morishita, S., Houmura, K., Hashimoto, K., Takeyasu, K. and Okazaki, T. 2000. Human centromere protein-A (CENP-A) can replace Histone H3 in nucleosome reconstitution *in vitro*. *Proc. Natl. Acad. Sci. USA* 97: 7266-7271.
6. Black, B.E., Jansen, L.E., Maddox, P.S., Foltz, D.R., Desai, A.B., Shah, J.V. and Cleveland, D.W. 2007. Centromere identity maintained by nucleosomes assembled with Histone H3 containing the CENP-A targeting domain. *Mol. Cell* 25: 309-322.
7. Okamoto, Y., Nakano, M., Ohzeki, J., Larionov, V. and Masumoto, H. 2007. A minimal CENP-A core is required for nucleation and maintenance of a functional human centromere. *EMBO J.* 26:1279-1291.
8. Maddox, P.S., Hyndman, F., Monen, J., Oegema, K. and Desai, A. 2007. Functional genomics identifies a Myb domain-containing protein family required for assembly of CENP-A chromatin. *J. Cell Biol.* 176: 757-763.
9. Black, B.E., Brock, M.A., Bédard, S., Woods, V.L., Jr. and Cleveland, D.W. 2007. An epigenetic mark generated by the incorporation of CENP-A into centromeric nucleosomes. *Proc. Natl. Acad. Sci. USA* 104: 5008-5013.

CHROMOSOMAL LOCATION

Genetic locus: Cenpa (mouse) mapping to 5 B1.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PRODUCT

CENP-A (m): 293T Lysate represents a lysate of mouse CENP-A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CENP-A (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CENP-A antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.