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### 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

# CINP (m2): 293T Lysate: sc-119267

## BACKGROUND

Cell cycle progression is controlled in part by a family of cyclin proteins and cyclin dependent kinases (Cdks). Cdk proteins work in concert with the cyclins to phosphorylate key substrates involved in each phase of cell cycle progression. Specifically, Cdk2 interacts with cyclins A, B1, B3, D, or E to control cell cycle progression. The cyclin-dependent kinase 2-interacting protein (CINP) interacts with components of the replication complex and Cdk2 and Cdc7, thereby providing a functional and physical link between Cdk2 and Cdc7 during firing of the origins of replication. However, CINP is phosphorylated by Cdc7, but not by Cdk2. CINP also interacts with ATR-interacting protein and regulates ATR-dependent signaling, resistance to replication stress and G<sub>2</sub> checkpoint integrity.

## REFERENCES

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4. Montagnoli, A., Valsasina, B., Brotherton, D., Troiani, S., Rainoldi, S., Tenca, P., Molinari, A. and Santocanale, C. 2006. Identification of Mcm2 phosphorylation sites by S-phase-regulating kinases. *J. Biol. Chem.* 281: 10281-10290.
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## CHROMOSOMAL LOCATION

Genetic locus: Cinp (mouse) mapping to 12 F1.

## PRODUCT

CINP (m2): 293T Lysate represents a lysate of mouse CINP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

CINP (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CINP 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.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.