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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

www.szabo-scandic.com

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

APC10 (h): 293T Lysate: sc-176849

BACKGROUND

Composed of more than ten subunits, the anaphase-promoting complex (APC) acts in a cell-cycle dependent manner to promote the separation of sister chromatids during the transition between metaphase and anaphase in mitosis. APC, or cyclosome, accomplishes this progression through the ubiquitination of mitotic cyclins and other regulatory proteins that are targeted for destruction during cell division. APC is phosphorylated, and thus activated, by protein kinases Cdk1/cyclin B and polo-like kinase (Plk). APC is under tight control by a number of regulatory factors, including CDC20, CDH1 and MAD2. Specifically, CDC20 and CDH1 directly bind to and activate APC's cyclin-ubiquitination activity. In contrast, MAD2 inhibits APC by forming a ternary complex with CDC20 and APC; thus preventing APC activation. APC10 contains a Doc1 homology domain, which is a β -sandwich structure common to many other putative E3 ubiquitin ligases. APC10 binds to core APC subunits throughout the cell cycle. Specifically, APC10 binds to the C-terminus of CDC27/APC3. During mitosis, APC10 is localized in centrosomes and mitotic spindles. APC10 also localizes to kinetochores from prophase to anaphase, and to the midbody in telophase and cytokinesis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ANAPC10 (human) mapping to 4q31.21.

PRODUCT

APC10 (h): 293T Lysate represents a lysate of human APC10 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

APC10 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive APC10 antibodies. Recommended use: 10-20 μ l 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 for detailed protocols and support products.