

C23 (m): 293T Lysate: sc-118912

BACKGROUND

C23 (nucleolin, NCL) is a eukaryotic nucleolar phosphoprotein that influences synthesis and maturation of ribosomes. C23 localizes to dense fibrillar regions of the nucleolus. It contains four RNA binding domains that interact with pre-rRNA during synthesis. C23 can influence RNA processing, ribosomal gene transcription and nucleolar targeting of ribosomal components. It is known to associate with a variety of proteins, including the nucleolar protein B23. Phosphorylation by Cdc2 and casein kinase II causes translocation of C23 from the nucleolus to the cytoplasm. Mitotic phosphorylated forms of Bcl-2 are present in nuclear structures in prophase HeLa cells together with C23 and Ki-67. Retinoic acid-induced apoptosis leads to C23 downregulation and Bcl-2 mRNA instability. C23 binds the human telomerase reverse transcriptase subunit (hTERT) through interactions with its RNA binding domain 4 and carboxyl-terminal RGG domain, and this interaction is critical for the nucleolar localization of hTERT.

REFERENCES

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8. Bouvet, P., et al. 1998. Nucleolin interacts with several ribosomal proteins through its RGG domain. *J. Biol. Chem.* 273: 19025-19029.
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CHROMOSOMAL LOCATION

Genetic locus: Ncl (mouse) mapping to 1 D.

PRODUCT

C23 (m): 293T Lysate represents a lysate of mouse C23 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

C23 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive C23 antibodies. Recommended use: 10-20 µl per lane.

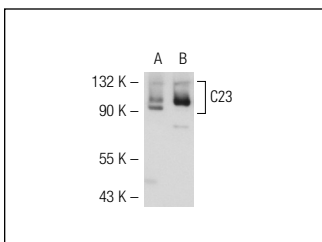
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

C23 (MS-3): sc-8031 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse C23 expression in C23 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



C23 (MS-3): sc-8031. Western blot analysis of C23 expression in non-transfected: sc-117752 (A) and mouse C23 transfected: sc-118912 (B) 293T whole cell lysates.

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.

PROTOCOLS

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