SANTA CRUZ BIOTECHNOLOGY, INC.

# C23 (271-520): sc-4443 WB

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*The Power to Question*

## 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. C23 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. C23 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 down-regulation 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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## SOURCE

C23 (271-520) is expressed in *E. coli* as a 55 kDa tagged fusion protein corresponding to amino acids 271-520 of C23 of human origin.

## STORAGE

Store at -20° C; stable for one year from the date of shipment.

## PRODUCT

C23 (271-520) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

## APPLICATIONS

C23 (271-520) is suitable a as Western blotting control for sc-8031.

## RESEARCH USE

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