

# RecQL1 (C-5): sc-271437

## BACKGROUND

In humans, the RecQ helicase family includes WRN, BLM, RecQL1, RecQL4 and RecQL5 proteins, all of which contain a conserved helicase domain. WRN and BLM have been demonstrated to be the responsible genes in Werner and Bloom syndromes, respectively. RecQL1 and RecQL5 also belong to the human RecQ helicase family, but their correlation with genetic disorders, if any, is unknown. The levels of RecQ helicase family members are differentially upregulated to guarantee genomic stability in cells that are transformed or actively proliferating. The gene encoding human RecQL4, which maps to chromosome 8q24.3, is believed to be the gene responsible for the development of Rothmund-Thomson syndrome (RTS). The genes encoding RecQL1 and RecQL5 map to chromosome 12p12.1 and 17q25.1, respectively.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RECQL (human) mapping to 12p12.1; Recql (mouse) mapping to 6 G2.

## SOURCE

RecQL1 (C-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-35 at the N-terminus of RecQL1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-271437 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

RecQL1 (C-5) is recommended for detection of RecQL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RecQL1 siRNA (h): sc-38217, RecQL1 siRNA (m): sc-38218, RecQL1 shRNA Plasmid (h): sc-38217-SH, RecQL1 shRNA Plasmid (m): sc-38218-SH, RecQL1 shRNA (h) Lentiviral Particles: sc-38217-V and RecQL1 shRNA (m) Lentiviral Particles: sc-38218-V.

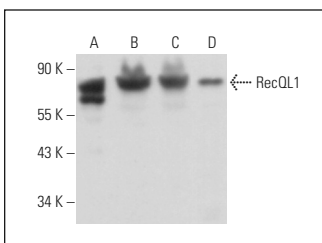
Molecular Weight of RecQL1: 75 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, HeLa nuclear extract: sc-2120 or HUV-EC-C whole cell lysate: sc-364180.

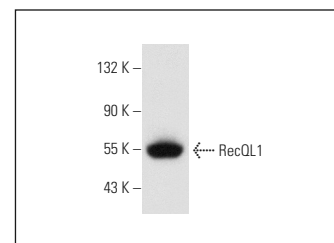
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



RecQL1 (C-5): sc-271437. Western blot analysis of RecQL1 expression in HeLa nuclear extract (A) and HUV-EC-C (B), Caco-2 (C) and IB4 (D) whole cell lysates.



RecQL1 (C-5): sc-271437. Western blot analysis of RecQL1 expression in HeLa nuclear extract.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. 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.