BACKGROUND

Werner’s Syndrome (WS), also called adult progeria, is an inherited, autosomal recessive disorder that is most common in families from regions of Japan where consanguineous marriages occur frequently. WS is characterized by premature aging and the early onset of age-related diseases and commonly results in cancer. The gene responsible for Werner’s syndrome, WRN, has been mapped to the short arm of chromosome 8, 8p12 and the subsequent cloning of the gene has revealed a predicted protein of 1,432 amino acids in length, that bears significant sequence homology with DNA helicases. Four mutations in WRN have been identified in patients afflicted with WS. Two of the mutations involve mRNA splice-junctions. Of these two mutations, one was found in 60 percent of the individuals examined. This mutation is predicted to cause a frameshift which results in a truncated WRN protein.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: WRN (human) mapping to 8p12.

APPLICATIONS

WRN (D-6) is recommended for detection of WRN of 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 1:30-1:300).

Suitable for use as control antibody for WRN siRNA (h): sc-36843, WRN shRNA Plasmid (h): sc-36843-SH and WRN shRNA (h) Lentiviral Particles: sc-36843-V.

Molecular Weight of WRN: 170 kDa.


RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS


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.