WRN

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	195C
PROTEIN:	human WRN (RecQ protein like 2)
PROTEIN WEB:	http://www.hprd.org/summary?hprd_id=05212&isoform_id=05212_1&isoform_name=
ANTIGEN USED:	GST-WRN (aa1072-1432)
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG1
SPECIES REACTIVITY:	human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze
APP RECOMMENDED:	IHQ-paraffin, IHQ-frozen, IF, WB
APP NO TESTED:	IP, Flow cytometry

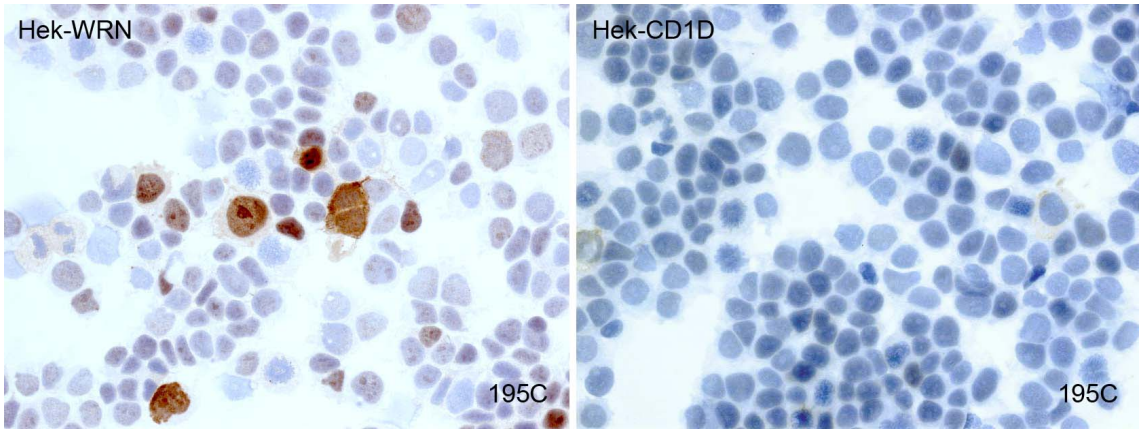
DESCRIPTION

This gene encodes a member of the RecQ subfamily and the DEAH (Asp-Glu-Ala-His) subfamily of DNA and RNA helicases. This protein contains a nuclear localization signal in the C-terminus and shows a predominant nucleolar localization. It possesses an intrinsic 3 to 5 DNA helicase activity, and is also a 3 to 5 exonuclease. Based on interactions between this protein and Ku70/80 heterodimer in DNA end processing, this protein may be involved in the repair of double strand DNA breaks. Defects in this gene are the cause of Werner syndrome, an autosomal recessive disorder characterized by premature aging.

APPLICATIONS

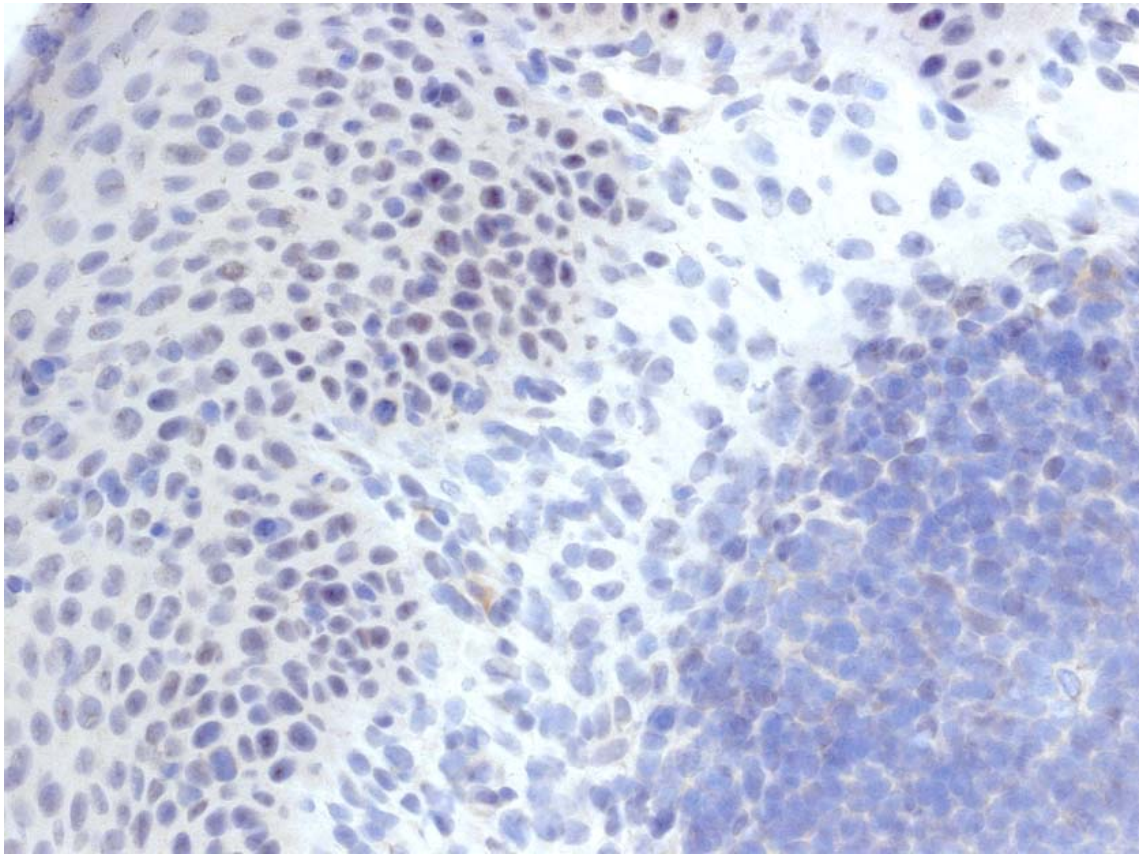
IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytospins									
	195C								

Paraffin tissue									
Recommended	195C	1:10	supernatant	citrate+PK	Novolink	Testicle		Nuclear	
Immunofluorescence									
Recommended	195C		supernatant						



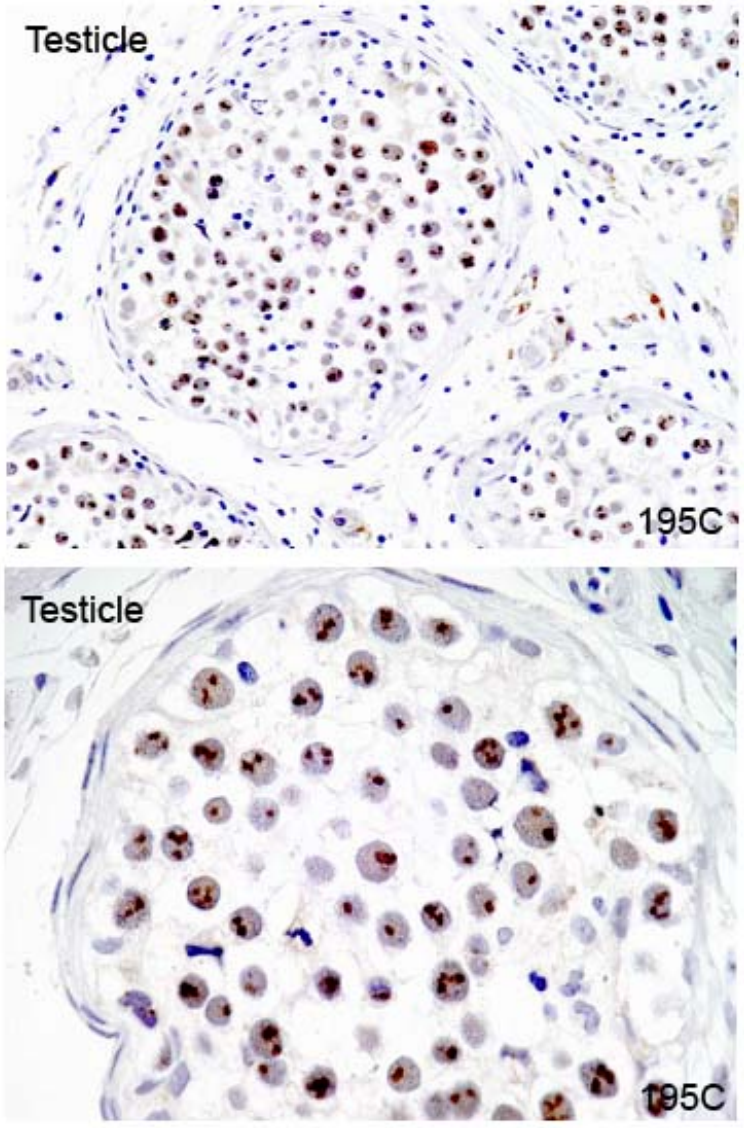
WRN antibody (195C) in HEK transfected cells.

Validation of WRN195C monoclonal antibody in transfected cells. Nuclear staining on frozen cytospin preparations of transfected HEK293T-WRN cells using antibody WRN195C. Hek-CD1D transfected cells were used as negative control.

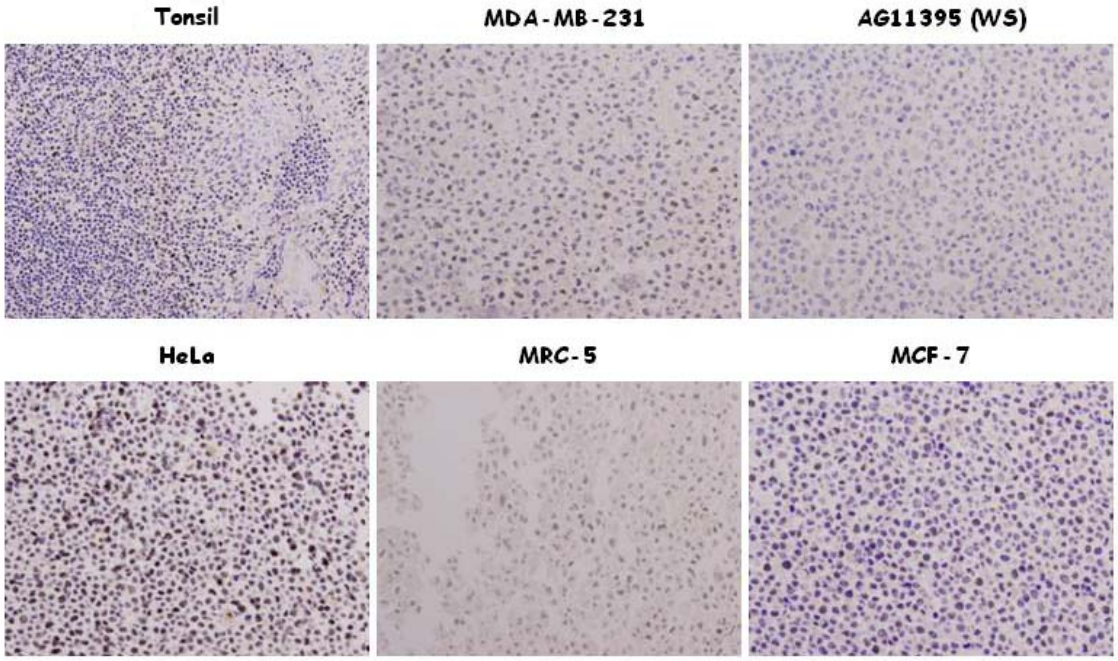


WRN expression in human frozen tonsil.

In tonsil, WRN protein is expressed by ephitelial area.



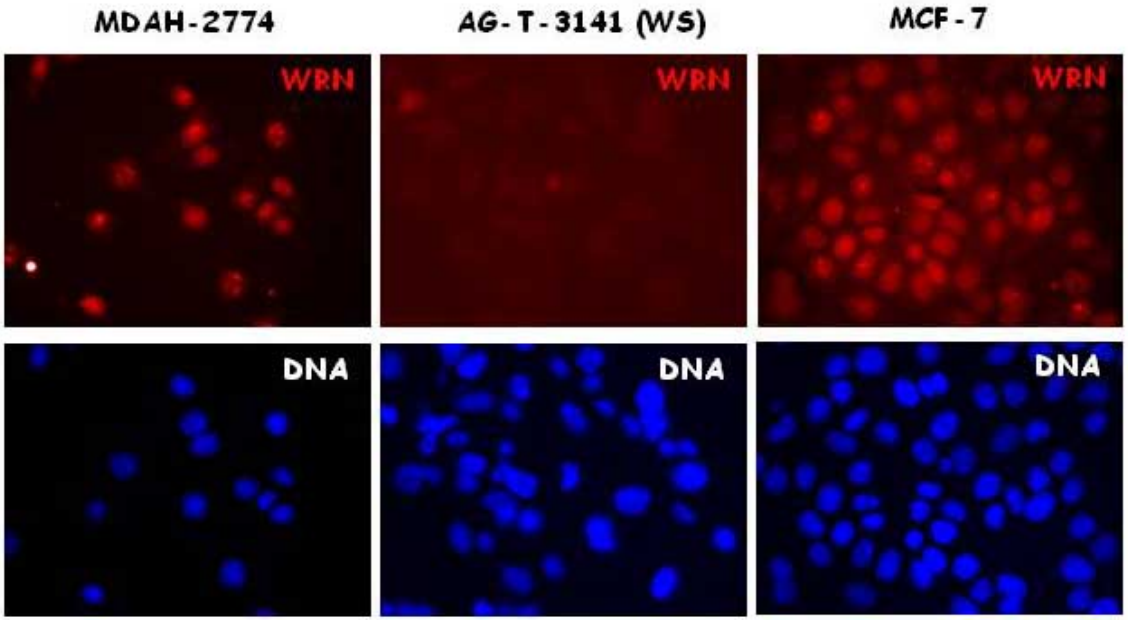
WRN (195C) immunohistochemistry on human testicle paraffin section



WRN (195C) immunohistochemistry on different paraffin sections.

Tissue samples: human tonsil, MDA-MB-231 (breast adenocarcinoma cell line), AG11395 WS (fibroblast of a patient with Werner Syndrome immortalized with SV40), Hela cell line, MRC-5 (lung fibroblast cell line) and MCF-7 (breast carcinoma cell line).

Kindly provided by Cayetano Von Kobbe.

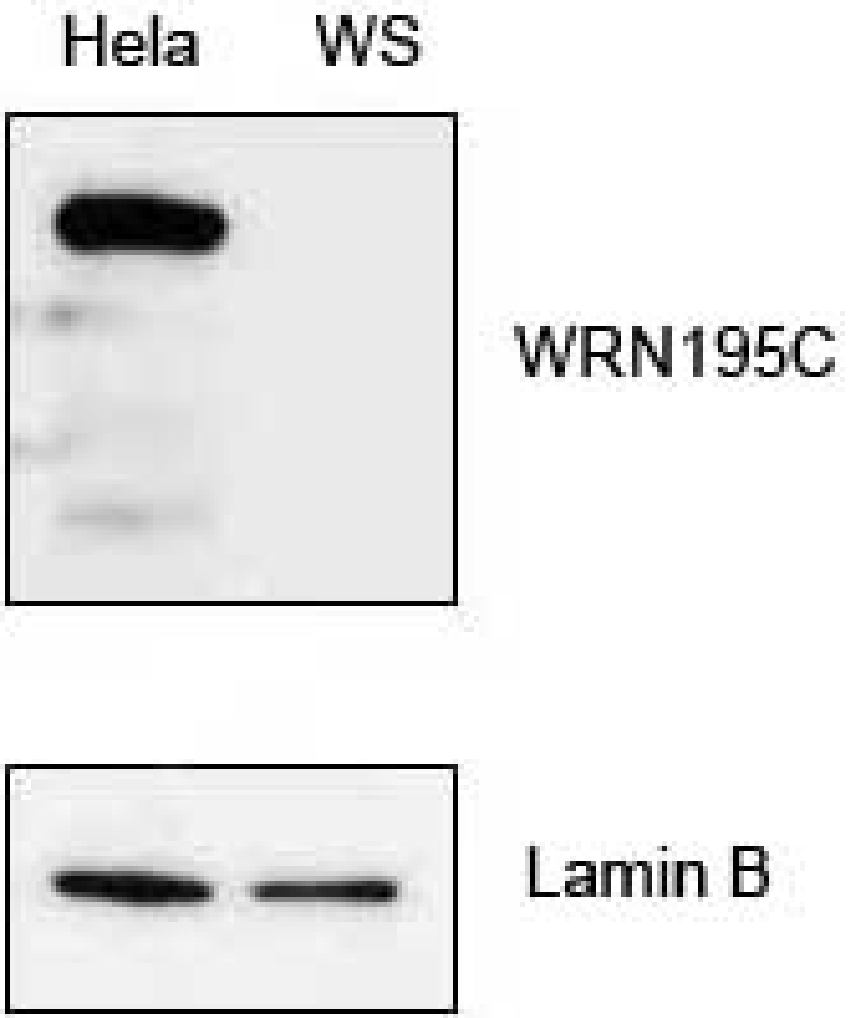


WRN (195C) immunofluorescence on different cell lines.

MDAH-2774 (Ovarian adenocarcinoma), AG-T-3141 (WS) (fibroblast WS patient) and MCF-7 (breast adenocarcinoma).

Kindly provided by Cayetano Von Kobbe.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	195C		supernatant	Hela		162kDa	162kDa	
Immunoprecipitation								



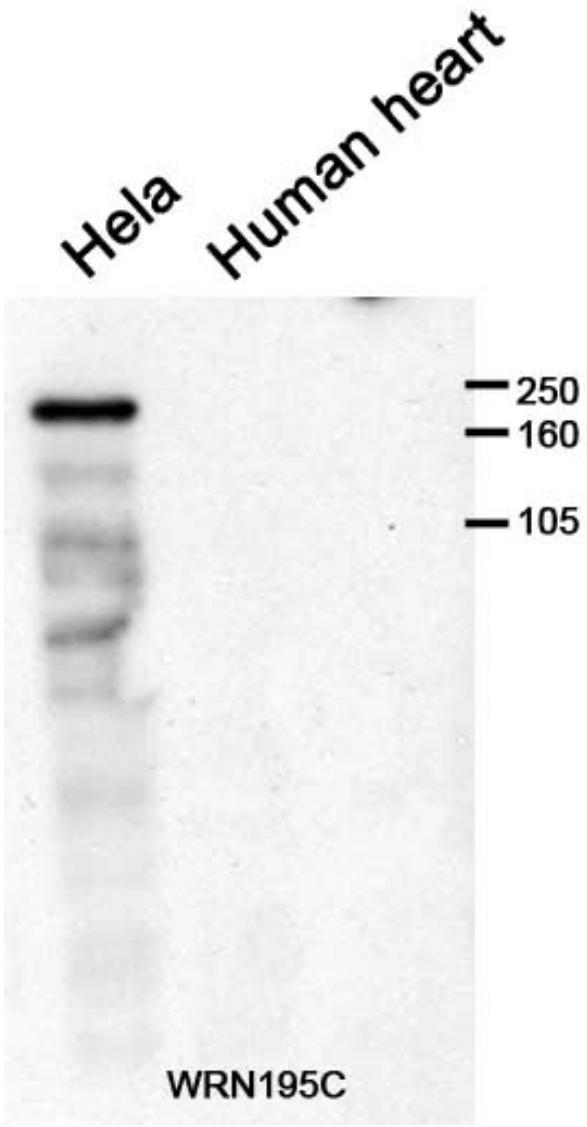
Western Blotting of anti-WRN (195C) using Hela WS cell lines.

Lane 1 Hela cell line (5 ul/lane, 50,000 cells/lane) (+)

Lane 2 WS (AG11395, fibroblast of a patient with Werner Syndrome immortalized with SV40, 6 ul/lane, 60,000 cells/lane) (-)

LaminB was used as loading control.

Kindly provided by Cayetano Von Kobbe.

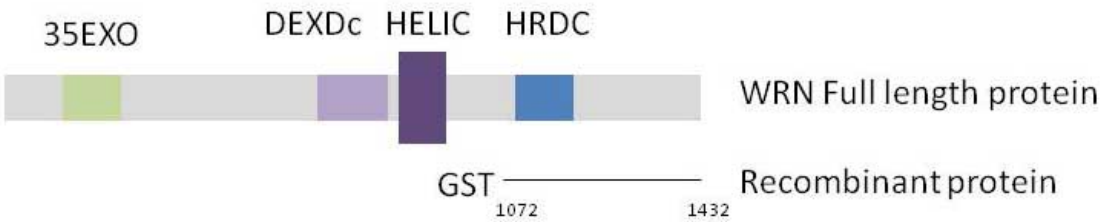


Western Blotting of anti-WRN (195C) using Hela and human heart extract.

Lane 1 Hela cell line (200ug) (+)

Lane 2 Human heart (200ug) (-)

OTHERS	Title	Description
Recommended	Epitope map of anti-WRN antibody	



Epitope map of anti-WRN antibody.

The figure shows WRN protein functional domains and the corresponding sequence of the antigen used in the immunization protocol.

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