

#4666 Store at -20C

# WRN (8H3) Mouse mAb



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S, IF-IC	H M	Endogenous	200	Mouse IgG1	#Q14191	7486

## Product Usage Information

### Application

Western Blotting  
Simple Western™  
Immunofluorescence (Immunocytochemistry)

### Dilution

1:1000  
1:10 - 1:50  
1:1600 - 1:6400

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

WRN (8H3) Mouse mAb detects endogenous levels of total WRN protein.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with full length human recombinant WRN protein.

## Background

The RecQ family of DNA and RNA helicases is a family of enzymes that has been shown to be important to genome integrity (1). Members of this family function in several DNA repair processes, including double-strand break repair, homologous recombination, and re-initiation of DNA replication at stalled replication forks (2,3). Mutations in RecQ helicase family members result in syndromes that display varying types of chromosomal abnormalities and overall genomic instability (1). *WRN* is a member of the RecQ family that has been identified as the gene underlying Werner's syndrome, an autosomal recessive disorder characterized by premature aging and predisposition to cancer (4). Cells from Werner's syndrome patients exhibit genomic instability that is associated with deficient DNA repair activity (5).

## Background References

1. Cobb, J.A. et al. (2002) *FEBS Lett* 529, 43-8.
2. Ouyang, K.J. et al. *Mech Ageing Dev* 129, 425-40.
3. Kaneko, H. et al. (2004) *Adv Biophys* 38, 45-64.
4. Epstein, C.J. et al. (1966) *Medicine (Baltimore)* 45, 177-221.
5. Salk, D. et al. (1985) *Adv Exp Med Biol* 190, 541-6.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting **W-S:** Simple Western™ **IF-IC:** Immunofluorescence (Immunocytochemistry)

## Cross-Reactivity Key

**H:** Human **M:** Mouse

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