



## PCNA (FL): sc-4278 WB

### BACKGROUND

The proliferating cell nuclear antigen (PCNA) is a 36 kDa molecular weight protein also known as cyclin. The protein has also been identified as the polymerase  $\delta$ -associated protein and is synthesized in early G<sub>1</sub> and S phases of the cell cycle. In early S phase, PCNA has a very granular distribution and is absent from the nucleoli. At late S phase, PCNA is prominent in the nucleoli. In cells fixed with organic solvents, PCNA has been shown to be strongly associated in the nuclear regions where DNA synthesis is occurring, whereas in cells fixed with aldehydes the staining is more diffuse but intense and occurs throughout the cell cycle. This is due to the presence of two basic forms of the PCNA protein, a soluble form sensitive to organic fixation and not involved in replication, and a second form that is insoluble and is associated with ongoing DNA synthesis. PCNA is a very conserved protein present not only in animal but also in plant cells.

### REFERENCES

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### SOURCE

PCNA (FL) is expressed in *E. coli* as 56 kDa tagged fusion protein corresponding to amino acids 1-261 representing full length PCNA of human origin.

### PRODUCT

PCNA (FL) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10  $\mu$ g protein in 0.1 ml SDS-PAGE loading buffer.

### APPLICATION

PCNA (FL) is suitable as a Western blotting control for sc-56 and sc-7907.

### STORAGE

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

### RESEARCH USE

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