

Store at  
-20C  
#13110**PCNA (D3H8P) XP<sup>®</sup> Rabbit mAb****Cell Signaling**  
TECHNOLOGY<sup>®</sup>**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com**Support:** 877-678-TECH (8324)**Web:** info@cellsignal.com  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IHC-P, IF-F, IF-IC, FC-FP	H M R Mk	Endogenous	36	Rabbit IgG	#P12004	5111

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Frozen)  
Immunofluorescence (Immunocytochemistry)  
Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000  
1:50  
1:4000 - 1:16000  
1:400 - 1:1600  
1:400 - 1:1600  
1:100 - 1:400

**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.

For a carrier free (BSA and azide free) version of this product see product #71395.

**Specificity/Sensitivity Source / Purification**

PCNA (D3H8P) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total PCNA protein.

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human PCNA protein.

**Background**

Proliferating cell nuclear antigen (PCNA) is a member of the DNA sliding clamp family of proteins that assist in DNA replication (1). Crystal structure data suggests that a PCNA homotrimer ring can encircle and slide along the DNA double helix (2). Multiple proteins involved in DNA replication, DNA repair, and cell cycle control bind to PCNA rather than directly associating with DNA, thus facilitating fast processing of DNA (reviewed in 3). PCNA protein expression is a well-accepted marker of proliferation.

**Background References**

1. Kelman, Z. and O'Donnell, M. (1995) *Nucleic Acids Res* 23, 3613-20.
2. Krishna, T.S. et al. (1994) *Cell* 79, 1233-43.
3. Maga, G. and Hubscher, U. (2003) *J Cell Sci* 116, 3051-60.

**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 **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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