

**PAF15 (D8E2Y) XP<sup>®</sup> Rabbit mAb**

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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, IHC-P	H	Endogenous	15	Rabbit IgG	#Q15004	9768

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

Western Blotting  
Immunohistochemistry (Paraffin)

**Dilution**

1:1000  
1:150

**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**

PAF15 (D8E2Y) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total PAF15 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the amino terminus of human PAF15 protein.

**Background**

Proliferating cell nuclear antigen (PCNA) is a member of the DNA sliding clamp family of proteins that assist in DNA replication (1). PCNA associated factor (PAF15) interacts with PCNA to recruit DNA replicative polymerase. In response to DNA damage, PCNA recruits a low fidelity DNA polymerase to allow bypass of lesions that would otherwise stall DNA replication. This form of DNA damage tolerance is called translesion synthesis (TLS), and is regulated in part by PAF15 (2,3). Ubiquitination of PAF15 at lysines 15 and 24 regulates its interactions with PCNA and DNA polymerase (3). PAF15 is overexpressed in human cancers, and research studies show a correlation between PAF15 expression and poor prognosis (3,4).

**Background References**

1. Kelman, Z. and O'Donnell, M. (1995) *Nucleic Acids Res* 23, 3613-20.
2. Chen, J. et al. (2011) *Cell Biochem Biophys* 60, 47-60.
3. Xie, C. et al. (2014) *Int J Biochem Cell Biol* 50, 127-31.
4. Yan, R. et al. (2016) *Oncotarget* 7, 38750-38761.

**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 **IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human

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