

#81533 Store at -20°C

## PAF15 (D8E2Y) XP® Rabbit mAb

Cell Signaling  
TECHNOLOGY®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

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P	H	Endogenous	15	Rabbit IgG	#Q15004	9768

## Product Usage Information

## Application

Western Blotting

## Dilution

1:1000

Immunohistochemistry (Paraffin)

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® 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

**WB:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

## Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

SignalStain is a registered trademark of Cell Signaling Technology, Inc.

XP is a registered trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

## Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the

end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.