

# PTEN Monoclonal Antibody (2F4C9)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Human
Host/Isotope	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	2F4C9
Conjugate	Unconjugated
Immunogen	Recombinant protein derived from the PTEN protein.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533087

Applications	Tested Dilution	Publications
ELISA (ELISA)	0.1-1 µg/mL	-
Immunocytochemistry (ICC)	0.5 µg/mL	1 Publication
Immunofluorescence (IF)	0.5 µg/mL	1 Publication
Western Blot (WB)	1-3 µg/mL	1 Publication
Immunohistochemistry (IHC)	-	3 Publications

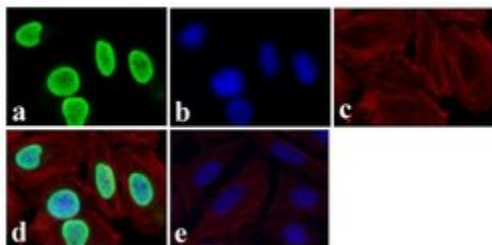
## Product Specific Information

32-5800 reacts specifically with the human PTEN protein. Reactivity was confirmed with cell lines which contain endogenous PTEN (NIH3T3, K652, and DU145 prostate cancer line) as well as transfected cell lines (Rat1 and 293T cells). This antibody detects the ~55 kDa PTEN protein and was successfully used in western blotting analysis of PTEN in breast cancer cell lines. No cross-reactivity to any other proteins has been detected.

## Product Images For PTEN Monoclonal Antibody (2F4C9)

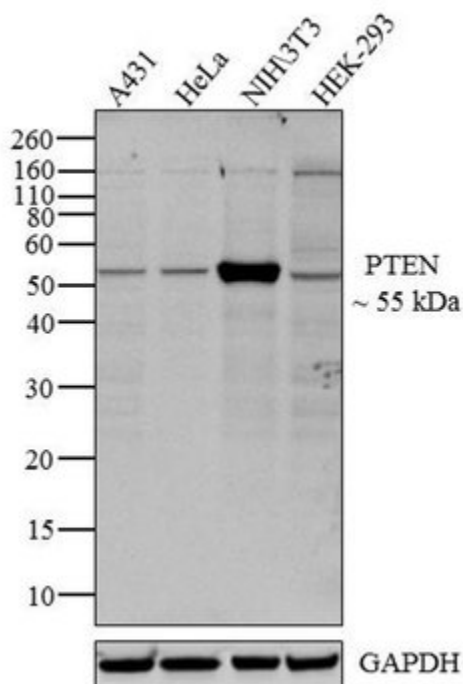
### PTEN Antibody (32-5800) in IF

Immunofluorescent analysis of PTEN was done on 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with PTEN Mouse Monoclonal Antibody (Product # 32-5800) at 0.5 µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Rabbit Anti-Mouse IgG Secondary Antibody (Product # A-11059) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing nuclear localization and panel e is a no primary antibody control. The images were captured at 20X magnification.



### PTEN Antibody (32-5800) in WB

Western blot analysis of PTEN was performed by loading 20 µg of A431 (lane1), HeLa (lane2), NIH/3T3 (lane3) and HEK-293 (lane4) cell lysate using Novex® NuPAGE® 10 % Bis-Tris gel (Product # NP0301BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and iBlot® Dry Blotting System (IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk for 1 hour at room temperature. PTEN was detected at ~55 kDa using PTEN Mouse monoclonal Antibody (Product # 32-5800) at 1-3 µg/mL in 2.5 % skim milk at 4°C overnight on a rocking platform. Goat Anti-Mouse IgG - HRP Secondary Antibody (Product # 62-6520) at 1:4000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



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## 6 References

### Immunocytochemistry (1)

#### Oncotarget

#### The ISG15-specific protease USP18 regulates stability of PTEN.

"325800 was used in immunocytochemistry to discover that PTEN is a substrate of the ISGylation post-translational modification pathway"

Authors: Mustachio LM, Kawakami M, Lu Y, Rodriguez-Canales J, Mino B, Behrens C, Wistuba I, Bota-Rabassedas N, Yu J, Lee JJ, Roszik J, Zheng L, Liu X, Freemantle SJ, Dmitrovsky E

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2017

### Immunofluorescence (1)

#### Oncotarget

#### The ISG15-specific protease USP18 regulates stability of PTEN.

"325800 was used in immunocytochemistry to discover that PTEN is a substrate of the ISGylation post-translational modification pathway"

Authors: Mustachio LM, Kawakami M, Lu Y, Rodriguez-Canales J, Mino B, Behrens C, Wistuba I, Bota-Rabassedas N, Yu J, Lee JJ, Roszik J, Zheng L, Liu X, Freemantle SJ, Dmitrovsky E

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2017

### Immunohistochemistry (3)

#### Oncotarget

#### The ISG15-specific protease USP18 regulates stability of PTEN.

"325800 was used in immunocytochemistry to discover that PTEN is a substrate of the ISGylation post-translational modification pathway"

Authors: Mustachio LM, Kawakami M, Lu Y, Rodriguez-Canales J, Mino B, Behrens C, Wistuba I, Bota-Rabassedas N, Yu J, Lee JJ, Roszik J, Zheng L, Liu X, Freemantle SJ, Dmitrovsky E

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2017

#### Hepatology research : the official journal of the Japan Society of Hepatology

#### Epigenetic and genetic alterations of PTEN in hepatocellular carcinoma.

Authors: Wang L, Wang WL, Zhang Y, Guo SP, Zhang J, Li QL

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2007

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### WB (1)

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