Phospho-PTEN (Ser380) Antibody



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: W, IP	Reactivity: H M R	Sensitivity: Endogenous	MW (kDa): 54	Source/Isotype: Rabbit	UniProt ID: #P60484	Entrez-Gene Id: 5728
Product Usage Information	•	Application Western Blotting Immunoprecipitation			Dilution 1:1000 1:50	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		Phospho-PTEN (Ser380) Antibody detects endogenous levels of PTEN only when phosphorylated at Ser380.				
Species predicted to react based on 100% sequence homology		Chicken				
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser380 of human PTEN. Antibodies are purified by protein A and peptide affinity chromatography.				
Background		PTEN (phosphatase and tensin homologue deleted on chromosome ten), also referred to as MMAC (mutated in multiple advanced cancers) phosphatase, is a tumor suppressor implicated in a wide variety of human cancers (1). PTEN encodes a 403 amino acid polypeptide originally described as a dual-specificity protein phosphatase (2). The main substrates of PTEN are inositol phospholipids generated by the activation of the phosphoinositide 3-kinase (PI3K) (3). PTEN is a major negative regulator of the PI3K/Akt signaling pathway (1,4,5). PTEN possesses a carboxy-terminal, noncatalytic regulatory domain with three phosphorylation sites (Ser380, Thr382, and Thr383) that regulate PTEN stability and may affect its biological activity (6,7). PTEN regulates p53 protein levels and activity (8) and is involved in G protein-coupled signaling during chemotaxis (9,10).				
Background References		1. Cantley, L.C. and Neel, B.G. (1999) <i>Proc Natl Acad Sci USA</i> 96, 4240-5. 2. Myers, M.P. et al. (1997) <i>Proc Natl Acad Sci USA</i> 94, 9052-7. 3. Myers, M.P. et al. (1998) <i>Proc Natl Acad Sci USA</i> 95, 13513-8. 4. Wan, X. and Helman, L.J. (2003) <i>Oncogene</i> 22, 8205-11. 5. Wu, X. et al. (1998) <i>Proc Natl Acad Sci USA</i> 95, 15587-91. 6. Vazquez, F. et al. (2000) <i>Mol Cell Biol</i> 20, 5010-8. 7. Torres, J. and Pulido, R. (2001) <i>J Biol Chem</i> 276, 993-8. 8. Freeman, D.J. et al. (2003) <i>Cancer Cell</i> 3, 117-30. 9. Funamoto, S. et al. (2002) <i>Cell</i> 109, 611-23. 10. Iijima, M. and Devreotes, P. (2002) <i>Cell</i> 109, 599-610.				
Species Reacti	vity	Species reactivity is de	termined by testin	g in at least one approve	ed 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

Cross-Reactivity Key H: Human M: Mouse R: Rat

Trademarks and Patents Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for

more information.

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 **Limited Uses**

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 and 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.

Orders: 877-616-CELL (2355) • orders@cellsignal.com • Support: 877-678-TECH (8324) • info@cellsignal.com • Web: cellsignal.com
For Research Use Only. Not for Use in Diagnostic Procedures.