



## PTEN Polyclonal Antibody

E92113

- Catalog Number:** E92113
- Amount:** 100ul
- 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).
- Species:** Rabbit
- Isotype:** IgG
- Storage/Stability:** Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
- Synonyms:** BZS; DEC; GLM2; MHAM; TEP1; MMAC1; PTEN1; 10q23del;
- Immunogen:** Recombinant protein of human PTEN
- Purification:** Affinity purification
- Reactivity:** H M R
- Applications:** WB IHC
- Molecular Weight:** 47kDa
- Swiss-Prot No. :** P60484
- Gene ID:** 5728
- References:** 1. Cantley, L.C. and Neel, B.G. (1999) Proc Natl Acad Sci USA 96, 4240-5. 2. Myers, M.P. et al. (1997) Proc Natl Acad Sci USA 94, 9052-7. 3. Myers, M.P. et al. (1998) Proc Natl Acad Sci USA 95, 13513-8. 4. Wan, X. and Helman, L.J. (2003) Oncogene 22, 8205-11. 5. Wu, X. et al. (1998) Proc Natl Acad Sci USA 95, 15587-91. 6. Vazquez, F. et al. (2000) Mol Cell Biol 20, 5010-8. 7. Torres, J. and Pulido, R. (2001) J Biol Chem 276, 993-8. 8. Freeman, D.J. et al. (2003) Cancer Cell 3, 117-30. 9. Funamoto, S. et al. (2002) Cell 109, 611-23. 10. Iijima, M. and Devreotes, P. (2002) Cell 109, 599-610.

**For Research Use Only**

