

Product datasheet for **TA323701**

PTEN Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 500-2000 WB positive control: NIH/3T3 cell lysate IHC: 20-100 Positive control: Human tonsil Predicted cell location: Nucleus
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 381-396 amino acids of human phosphatase and tensin homolog
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	47 kDa
Gene Name:	phosphatase and tensin homolog
Database Link:	NP_000305 Entrez Gene 19211 Mouse Entrez Gene 5728 Human P60484



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Background:

This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded this gene is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. Unlike most of the protein tyrosine phosphatases, this protein preferentially dephosphorylates phosphoinositide substrates. It negatively regulates intracellular levels of phosphatidylinositol-3,4,5-trisphosphate in cells and functions as a tumor suppressor by negatively regulating AKT/PKB signaling pathway.

Synonyms:

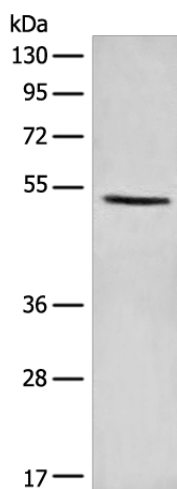
10q23del; BZS; CWS1; DEC; GLM2; MHAM; MMAC1; PTEN1; TEP1

Protein Families:

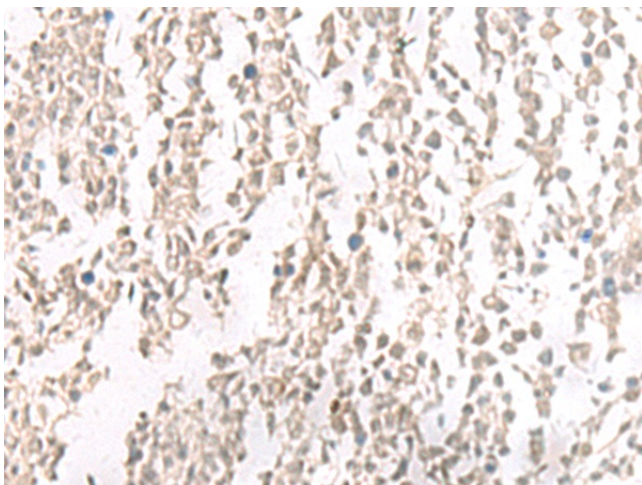
Druggable Genome, Phosphatase

Protein Pathways:

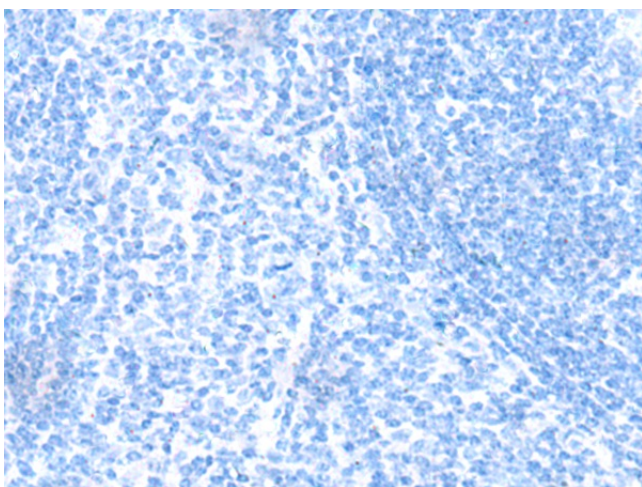
Endometrial cancer, Focal adhesion, Glioma, Inositol phosphate metabolism, Melanoma, p53 signaling pathway, Pathways in cancer, Phosphatidylinositol signaling system, Prostate cancer, Small cell lung cancer, Tight junction

Product images:

Gel: 8%SDS-PAGE
Lysate: 40 μ g
Lane: NIH/3T3 cell lysate
Primary antibody: TA323701 (PTEN Antibody) at dilution 1/1100
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution
Exposure time: 20 seconds



Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA323701 (PTEN Antibody) at dilution 1/25 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human tonsil tissue using TA323701 (PTEN Antibody) at dilution 1/25, treated with synthetic peptide. (Original magnification: ×200)