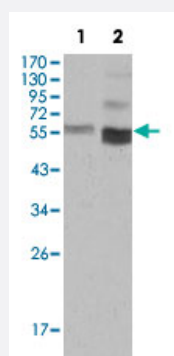


PTEN monoclonal antibody, clone 1B8

Catalog # MAB10405

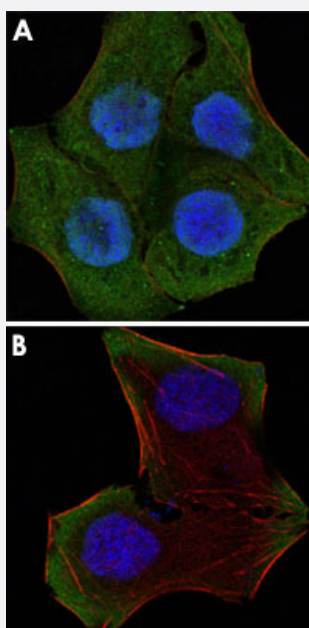
Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) against HeLa (1) and NIH/3T3 (2) cell lysate.

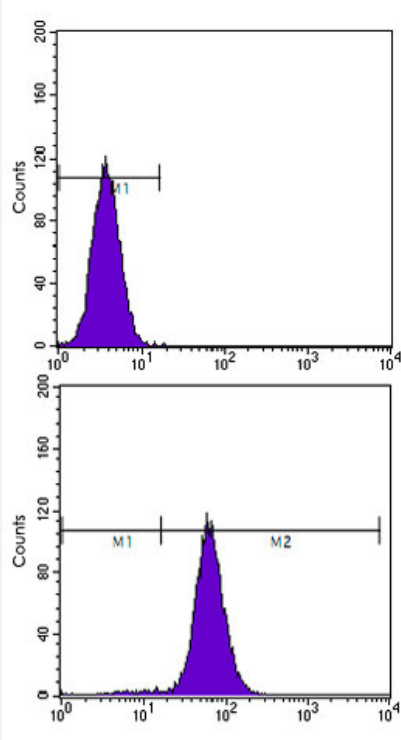


Immunofluorescence

Confocal immunofluorescence analysis of HeLa (A) and HepG2 (B) cells using PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) (green).
Red: Actin filaments have been labeled with DY-554 phalloidin.
Blue: DRAQ5 fluorescent DNA dye.

Flow Cytometry

Flow cytometric analysis of HeLa cells using PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) (B) and negative control (A).



Specification

Product Description	Mouse monoclonal antibody raised against recombinant PTEN.
Immunogen	Recombinant protein corresponding to human PTEN.
Host	Mouse
Theoretical MW (kDa)	54
Reactivity	Human, Mouse
Form	Liquid
Isotype	IgG1
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunofluorescence (1:200-1:1000) Flow cytometry (1:200-1:400) The optimal working dilution should be determined by the end user.
Storage Buffer	In ascites (0.03% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) against HeLa (1) and NIH/3T3 (2) cell lysate.

- Immunofluorescence

Confocal immunofluorescence analysis of HeLa (A) and HepG2 (B) cells using PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) (green).

Red: Actin filaments have been labeled with DY-554 phalloidin.

Blue: DRAQ5 fluorescent DNA dye.

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of HeLa cells using PTEN monoclonal antibody, clone 1B8 (Cat # MAB10405) (B) and negative control (A).

Gene Info — PTEN

Entrez GeneID [5728](#)

Gene Name PTEN

Gene Alias 10q23del, BZS, MGC11227, MHAM, MMAC1, PTEN1, TEP1

Gene Description phosphatase and tensin homolog

Omim ID [137800](#) [153480](#) [158350](#) [174900](#) [176807](#) [176920](#) [188470](#) [276950](#) [601728](#) [605309](#) [607174](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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. [provided by RefSeq]

Other Designations

MMAC1 phosphatase and tensin homolog deleted on chromosome 10[OTTHUMP00000020032] mutated in multiple advanced cancers 1

Pathway

- [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](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Astrocytoma](#)
- [Autistic Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)

- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Craniofacial Abnormalities](#)
- [Developmental Disabilities](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hamartoma Syndrome](#)
- [Hyperplasia](#)
- [Infant](#)
- [Insulin Resistance](#)
- [Learning Disorders](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)

- [Mental Retardation](#)
- [Microsatellite Instability](#)
- [Narcolepsy](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteus Syndrome](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)

- [Werner syndrome](#)