

## 12-4178: Phospho-PTEN (Ser380/Thr382/383) (Clone: E4) rabbit mAb APC conjugate

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	PTENS380T382383-E4
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	APC
<b>Format :</b>	Conjugated
<b>Alternative Name :</b>	Phosphatidylinositol 3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase, Mutated in multiple advanced cancers 1, MMAC1, Phosphatase and tensin homolog, TEP1
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Ser380 and Thr382/383 of human phospho PTEN

### Description

PTEN has been identified as a tumor suppressor gene and has been found to be mutated in a significant number of human cancers, including prostate, brain, and breast cancer. PTEN shares sequence homology with the protein-tyrosine phosphatase (PTPase) family of proteins and negatively regulates the PI3K/Akt pathway. PTEN de-phosphorylates target proteins, and recombinant PTEN has been shown to have phosphoinositide 3-phosphatase and inositol phosphate 3-phosphatase activity. Studies of primary tumor cells show a loss of PTEN expression after metastasis to the brain, via astrocyte-derived microRNAs. A cluster of phosphorylation sites (S380, T382, T383, and S385) in the C-terminal tail of PTEN drive a conformational change that reduces PTEN activity by inhibiting membrane interactions.

### Product Info

<b>Amount :</b>	10 Tests / 100 Tests
<b>Content :</b>	1X PBS, 0.09% NaN <sub>3</sub> , 0.2% BSA
<b>Storage condition :</b>	Store at 2-8°C. Avoid repeated freeze and thaw cycles.

### Application Note

For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

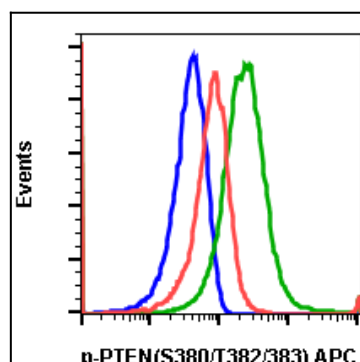


Fig-1: Flow cytometric analysis of A431 cells, unstained and untreated cells as negative control (blue) or stained untreated (green) or stained and treated with lambda phosphatase (red) using Phospho-PTEN (Ser380/Thr382/383) antibody PTENS380T382383-E4 APC conjugate.