

## Product Data Sheet: Purified anti-phospho-PTEN (Ser380/Thr382/383) rabbit mAb

|                               |   |
|-------------------------------|---|
| <b>Catalog Number:</b>        | 2131  |
| <b>Clone:</b>                 | PTENS380T382383-E4  |
| <b>Isotype:</b>               | Rabbit IgG1κ  |
| <b>Immunogen:</b>             | A synthetic phospho-peptide corresponding to residues surrounding Ser380 and Thr382/383 of human phospho PTEN |
| <b>Reactivity:</b>            | Mouse,Human   |
| <b>Cross Reactivity:</b>      | Predicted to work with mouse, rat, and other homologues.  |
| <b>Preparation:</b>           | Protein A+G   |
| <b>Formulation:</b>           | 1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA   |
| <b>Applications:</b>          | WB,Flow Cytometry   |
| <b>Recommended Usage:</b>     | 1.0 - 0.1 µg/ml. Optimum concentration should be determined by the user.                                      |
| <b>Product Configuration:</b> | 200 ul (0.5mg/ml, more than 200 western blots)  |
| <b>Detection:</b>             | Anti-Rabbit IgG   |

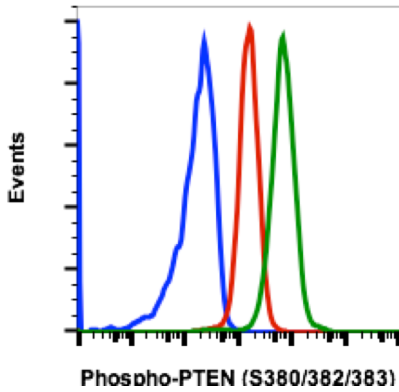
### Description

PTEN (phosphatase and tensin homolog, phospho PTEN) was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded by 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. Phospho PTEN 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.

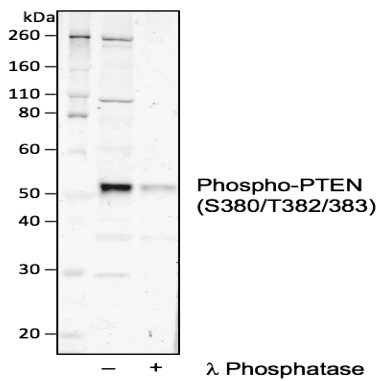
### References

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 LJ (2003) Oncogene 22, 8205-11
5. Wu, X. et al. (1998) Proc Natl Acad Sci USA 95, 15587-91.

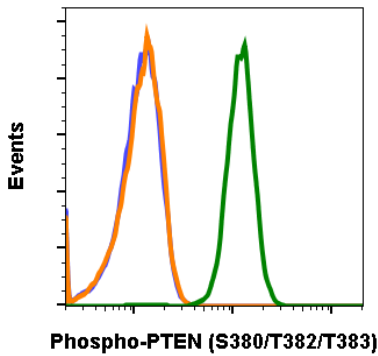
### Purified anti-phospho-PTEN (Ser380/Thr382/383) rabbit mAb Images



Flow cytometric analysis of U937 cells, secondary antibody only negative control (blue) or untreated (red) or treated with CalA (green) using Phospho-PTEN (Ser380/382/383) antibody PTENS380T382383-E4 at 0.1 µg/mL. Cat. #2131.



Western blot analysis of HEK293 cell extract, untreated or treated with lambda phosphatase using Phospho-PTEN (Ser380/Thr382/383) antibody PTENS380T382383-E4. Cat. #2131. Concentration 0.01 µg/mL.



PTENS380T382383-E4 recognizes basal phosphorylation levels in mouse cells. Flow cytometric analysis of L929 cells, secondary antibody only (blue) or 0.1 µg/mL of isotype control Cat. #2141 (orange) or of Phospho-PTEN (Ser380/Thr382/383) antibody PTENS380T382383-E4 (green). Cat. #2131.