SANTA CRUZ BIOTECHNOLOGY, INC.

# PTEN (FL): sc-4277 WB

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

As human tumors progress to advanced stages, one genetic alteration that occurs at high frequency is a loss of heterozygosity (LOH) at chromosome 10q23. Mapping of homozygous deletions on this chromosome led to the isolation of the PTEN gene, also designated MMAC1 (for mutated in multiple advanced cancers) and TEP1. This candidate tumor suppressor gene exhibits a high frequency of mutations in human glioblastomas and is also mutated in other cancers, including sporadic brain, breast, kidney and prostate cancers. PTEN has been associated with Cowden disease, an autosomal dominant cancer predisposition syndrome. The PTEN gene product is a putative protein tyrosine phosphatase that is localized to the cytoplasm, and it shares extensive homology with the cytoskeletal proteins tensin and auxilin. Gene transfer studies have indicated that the phosphatase domain of PTEN is essential for growth suppression of glioma cells.

## REFERENCES


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## SOURCE

PTEN (FL) is expressed in *E. coli* as a 72 kDa tagged fusion protein of human origin corresponding to amino acids 1-403 representing full length PTEN.

## PRODUCT

PTEN (FL) is purified bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

## APPLICATIONS

PTEN (FL) is suitable as a Western blotting control for sc-6818, sc-7974 and sc-9145.

## STORAGE

Store at -20° C; stable for one year from the date of shipment.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.