Recombinant human PTEN protein

Catalog Number: ATGP0357

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-403aa

UniProt No.
P60484

NCBI Accession No.
NP_000305.3

Alternative Names
Phosphatase and tensin homolog, BZS, MHAM, MMAC1, PTEN1, TEP1, Phosphatase and tensin homolog, PTEN, PTEN1, mutated in multiple advanced cancers 1,

PRODUCT SPECIFICATION

Molecular Weight
49.3 kDa (423aa)

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM EDTA, 2mM DTT, 100mM NaCl, and 20% glycerol

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
PTEN, also known as phosphatase and tensin homolog, is a tumor suppressor that is mutated in a large number of cancers at high frequency. This protein acts as both a dual-specificity protein phosphatase and a lipid phosphatase, removing the phosphate in the D3 position of the inositol ring from phosphatidylinositol 3, 4, 5-trisphosphate. 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. Recombinant PTEN

protein was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

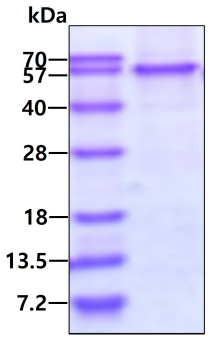
<MGSSHHHHHH SSGLVPRGSH> MTAIIKEIVS RNKRRYQEDG FDLDLTYIYP NIIAMGFPAE RLEGVYRNNI DDVVRFLDSK HKNHYKIYNL CAERHYDTAK FNCRVAQYPF EDHNPPQLEL IKPFCEDLDQ WLSEDDNHVA AIHCKAGKGR TGVMICAYLL HRGKFLKAQE ALDFYGEVRT RDKKGVTIPS QRRYVYYYSY LLKNHLDYRP VALLFHKMMF ETIPMFSGGT CNPQFVVCQL KVKIYSSNSG PTRREDKFMY FEFPQPLPVC GDIKVEFFHK QNKMLKKDKM FHFWVNTFFI PGPEETSEKV ENGSLCDQEI DSICSIERAD NDKEYLVLTL TKNDLDKANK DKANRYFSPN FKVKLYFTKT VEEPSNPEAS SSTSVTPDVS DNEPDHYRYS DTTDSDPENE PFDEDQHTQI TKV

General References

Li DM., et al. (1997) Cancer Res. 57(11):2124-9.
Maehama T., et al. (1998) J Biol Chem. 273(22):13375-8.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.