

AR09238PU-S**Human PTEN (1-403, His-tag) - Purified****Alternate names:**

4, 5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN, MMAC1, Mutated in multiple advanced cancers 1, Phosphatase and tensin homolog, Phosphatidylinositol-3, TEP1

Quantity:

20 µg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:

[P60484](#)

NCBI:

[NP_000305](#)

GenEID:

[5728](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >85% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM EDTA, 2 mM DTT, 100 mM NaCl, and 20% glycerol

Description:

Recombinant PTEN protein, fused to His-tag, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHH SGLVPRGSH MTAIIKEIVS RNKRRYQEDG FDLDLTYIYP NIIAMGFPAE
RLEGVYRNNI DDVVRFLDSK HKNHYKIYNL CAERHYDTAK FNCRVAQYYP EDHNPPQLEL
IKPFCEDLDQ WLSEDDNHVA AIHCKAGKGR TGVMICAYLL HRGKFLKAQE ALDFYGEVRT
RDKKGV TIPS QRRYVYYYSY LLKNHLDYRP VALLFHKMMF ETIPMFSGGT CNPQFVVCQL
KVKIYSSNSG PTRREDKFMF FEFPQPLPVC GDIKVEFFHK QNKMLKKDKM FHFVWNTFFI
PGPEETSEKV ENGLSLCDQEI DSICSIERAD NDKEYLVLT LTKNDLDKANK DKANRYFSPN
FKVKLYFTKT VEEPSNPEAS SSTSVPDVS DNEPDHYRYS DTTSDPENE PFDEDQHTQI TKV

Molecular weight: 49.3 kDa (423 aa)

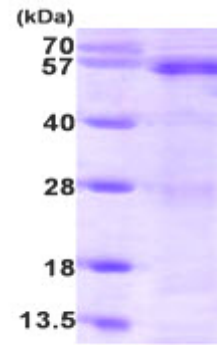
Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human PTEN, 1-403 aa, His-tagged: 15% SDS-PAGE (3 μ g)

