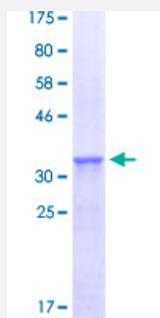


PTEN (Human) Recombinant Protein (Q02)

Catalog # H00005728-Q02

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human PTEN partial ORF (NP_000305.1, 2 a.a. - 91 a.a.) recombinant protein with GST tag at N-terminal.
Sequence	TAIIKEIVSRNKRRYQEDGFDLDTYYPNIIAMGFPAERLEGVYRNNIDDVVRFLDSKHKNHYKYNLC AERHYDTAKFNCRVAQYPFE
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	35.53
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PTEN

Entrez GeneID	5728
GeneBank Accession#	NM_000314.1
Protein Accession#	NP_000305.1
Gene Name	PTEN
Gene Alias	10q23del, BZS, MGC11227, MHAM, MMAC1, PTEN1, TEP1
Gene Description	phosphatase and tensin homolog
Omim ID	137800 153480 158350 174900 176807 176920 188470 276950 601728 605309 607174
Gene Ontology	Hyperlink
Gene Summary	This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded 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. It 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. [provided by RefSeq]
Other Designations	MMAC1 phosphatase and tensin homolog deleted on chromosome 10 OTTHUMP00000020032 mutated in multiple advanced cancers 1

Pathway

- [Endometrial cancer](#)
- [Focal adhesion](#)

- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [Tight junction](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Astrocytoma](#)
- [Autistic Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)

- [Craniofacial Abnormalities](#)
- [Developmental Disabilities](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hamartoma Syndrome](#)
- [Hyperplasia](#)
- [Infant](#)
- [Insulin Resistance](#)
- [Learning Disorders](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Retardation](#)
- [Microsatellite Instability](#)
- [Narcolepsy](#)
- [Neoplasm Metastasis](#)

- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteus Syndrome](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)