

Recombinant Human Phosphatase and Tensin Homolog (PTEN)

CATALOG #:	4838-5
AMOUNT:	5 µg
LOT #:	_____
SOURCE:	<i>E. coli</i>
PURITY:	≥ 90% as determined by SDS-PAGE
ENDOTOXIN:	Less than 0.1 ng/mg of human PTEN
MOLECULAR WEIGHT:	80 kDa (GST tagged)
PHYSICAL APPEARANCE:	Sterile filtered liquid
FORMULATION:	100 µg/ml in 50 mM Tris-Acetate, pH 7.5, 150 mM NaCl, 0.1 mM EDTA, 10 mM glutathione, 25 mM DTT, 0.1 mM PMSF and 25% Glycerol.
STORAGE CONDITIONS:	Stored at -80°C in aliquots. Stable for 6-12 months. Avoid freeze-thaw cycles.

DESCRIPTION: PTEN, a tumor suppressor, has been implicated in a large number of human tumors and is conserved from humans to worms. Characterization of PTEN protein showed that it is a phosphatase that acts on proteins and on 3-phosphorylated phosphoinositides, and can therefore modulate signal-transduction pathways that involve lipid second messengers. Recent results indicate that at least part of its role is to regulate the activity of the serine/threonine kinase AKT/PKB, and thus influence cell survival signaling. Recombinant PTEN is purified by proprietary chromatographic techniques.

BIOACTIVITY: A Phosphatase specific activity of ≥ 400 nmol/min/mg was determined using the substrate phosphatidylinositol (3,4,5) triphosphate at a final concentration of 125 µM in 20 mM Tris, pH 7.5, 150 mM NaCl, 50 µM MgCl₂, 0.05 % Tween-20, 0.2 % 2-mercaptoethanol.

USAGE: For Research Use Only. Not to be used in humans.

RELATED PRODUCTS:

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- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

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- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione Fluorometric & Colorimetric Assay Kits
- Nitric Oxide Fluorometric & Colorimetric Assay Kits

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- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

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- CETP & PLTP Activity Assay & Drug Discovery Kits
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- Luciferase and Beta-Gal Reporter Assays

Antibodies & Recombinant Proteins (many)