EXBIO Antibodies

PRODUCT DATA SHEET

11-510-C050

Polyclonal Antibody to PTEN Purified Antibody (0.05 mg)

Clone: Polyclonal

Isotype: Rabbit None

Specificity: The polyclonal antibody reacts with PTEN (recognized epitope: in C-terminal sequence of PTEN). PTEN is expressed in almost all tissues with an estimated molecular weight of 47 kDa.

Immunogen: Synthetic peptide (coupled with KLH) derived from the C-terminal sequence of human PTEN. The recognized sequence in human PTEN differs by one residue from sequence in mouse and rat PTEN.

Species Reactivity: Human

Application: Western Blotting
Recommended dilution: 0.5-1 µg/ml
Positive material: RAJI human Burkitt lymphoma cell line
Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmli SDS-PAGE sample buffer. Boil for 5 min.
Application note: Both reducing and non-reducing conditions. Reducing conditions are recommended.

Purity: > 95% (by SDS-PAGE)

Purification: Purified from rabbit serum by immunoaffinity chromatography.

Concentration: 1 mg/ml

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

Storage / Stability: Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

Expiration: See vial label

Lot Number: See vial label

Background: PTEN (phosphatase and tensin homolog) is a multifunctional phosphatase whose major substrate is PIP3 (phosphatidylinositol-3,4,5-triphosphate) generated by PI3K (phosphatidylinositol 3-kinase) usually after cell stimulation by growth factors. By dephosphorylating PIP3, PTEN negatively regulates the PI3K-Akt pathway and exerts tumour suppression. PTEN is also required for the maintenance of organ-specific stem/progenitor cells in adult brain, prostate, blood cells and embryonic germ cells, as wel as for proper development of various tissues. PTEN is able to enter nucleus where plays roles in chromosome stability, DNA repair, cell cycle arrest and cellular stability.

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References:

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