

Anti-DNA Polymerase beta/POLB Antibody Picoband® Cy3 Conjugated

Catalog Number: PB9812-Cy3

About POLB

Polymerase (DNA directed), beta, also known as POLB, is an enzyme that, in humans, is encoded by the POLB gene. It is localized on 8p11.2. The protein encoded by this gene is a DNA polymerase involved in base excision and repair, also called gap-filling DNA synthesis. It is found that a truncated POLB is expressed in primary colorectal tumors and inhibits the normal repair function of wildtype POLB. The encoded protein, acting as a monomer, is normally found in the cytoplasm, but it translocates to the nucleus upon DNA damage. Several transcript variants of this gene exist, but the full-length nature of only one has been described to date. Additionally, human POLB forms a complex with and is methylated by PRMT6. In vitro, methylated POLB possesses significantly higher DNA polymerase activity when compared to that of unmodified enzyme. The increase in DNA polymerase activity upon methylation is due to the enhanced DNA binding and processivity of POLB.

Overview

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| Product Name | Anti-DNA Polymerase beta/POLB Antibody Picoband® Cy3 Conjugated |
| Reactive Species | Human, Mouse, Rat |
| Application | Flow Cytometry |
| Clonality | Polyclonal |
| Formulation | Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.02% NaN ₃ . |
| Storage Instructions | At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light. |
| Host | Rabbit |
| Uniprot ID | P06746 |

Technical Details

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| Immunogen | E.coli-derived human POLB recombinant protein (Position: L122-E335). Human POLB shares 95.3% and 94.9% amino acid (aa) sequence identity with mouse and rat POLB, respectively. |
| Cross Reactivity | No cross-reactivity with other proteins. |
| Isotype | Rabbit IgG |
| Form | Liquid |
| Concentration | 0.5 mg/mL |
| Purification | Immunogen affinity purified. |
| Conjugate | Cy3 Excitation Wavelength: 554 nm Emission Wavelength: 568 nm |

Suggested Dilutions

Flow Cytometry, Optimal dilutions should be determined by end users.

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Anti-DNA Polymerase beta/POLB Antibody - Cy3

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