

POLI Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14526b

Specification

POLI Antibody (C-term) - Product Information

| Application Primary Accession Other Accession | IHC-P, WB,E <u>O9UNA4</u> NP 009126.2 |
|---|---|
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 83006 |
| Antigen Region | 673-701 |

POLI Antibody (C-term) - Additional Information

Gene ID 11201

Other Names DNA polymerase iota, Eta2, RAD30 homolog B, POLI, RAD30B

Target/Specificity

This POLI antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 673-701 amino acids from the C-terminal region of human POLI.

Dilution IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions POLI Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

POLI Antibody (C-term) - Protein Information

Name POLI



Synonyms RAD30B

Function Error-prone DNA polymerase specifically involved in DNA repair (PubMed:<u>11013228</u>, PubMed:<u>11387224</u>). Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls (PubMed:<u>11013228</u>, PubMed:<u>11387224</u>, PubMed:<u>14630940</u>, PubMed:<u>15199127</u>). Favors Hoogsteen base-pairing in the active site (PubMed:<u>15254543</u>). Inserts the correct base with high-fidelity opposite an adenosine template (PubMed:<u>15254543</u>). Exhibits low fidelity and efficiency opposite a thymidine template, where it will preferentially insert guanosine (PubMed:<u>11013228</u>). May play a role in hypermutation of immunoglobulin genes (PubMed:<u>12410315</u>). Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity (PubMed:<u>11251121</u>, PubMed:<u>14630940</u>).

Cellular Location

Nucleus. Note=Binding to ubiquitin mediates localization to replication forks after UV-induced DNA damage. {ECO:0000250|UniProtKB:Q6R3M4}

Tissue Location Ubiquitous. Highly expressed in testis.

POLI Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

POLI Antibody (C-term) - Images



POLI Antibody (C-term) (Cat. #AP14526b) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the POLI antibody detected the POLI protein (arrow).





POLI Antibody (C-term) (AP14526b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of POLI Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

POLI Antibody (C-term) - Background

Error-prone DNA polymerase specifically involved in DNA repair. Plays an important role in translesion synthesis, where the normal high-fidelity DNA polymerases cannot proceed and DNA synthesis stalls. Favors Hoogsteen base-pairing in the active site. Inserts the correct base with high-fidelity opposite an adenosine template. Exhibits low fidelity and efficiency opposite a thymidine template, where it will preferentially insert guanosine. May play a role in hypermutation of immunogobulin genes. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but may not have lyase activity.

POLI Antibody (C-term) - References

Arora, M., et al. Leukemia 24(8):1470-1475(2010) Thyagarajan, B., et al. Biol. Blood Marrow Transplant. 16(8):1084-1089(2010) Kazakov, A.A., et al. Biochemistry Mosc. 75(7):905-911(2010) Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010) Monsees, G.M., et al. Breast Cancer Res. Treat. (2010) In press :