

## POLE3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7316a

## **Specification**

## POLE3 Antibody (N-term) - Product Information

Application WB, FC,E
Primary Accession Q9NRF9

Other Accession <u>Q642A5</u>, <u>Q9IKP7</u>, <u>Q3SZN5</u>

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 16860
Antigen Region 5-34

## POLE3 Antibody (N-term) - Additional Information

#### **Gene ID 54107**

#### **Other Names**

DNA polymerase epsilon subunit 3, Arsenic-transactivated protein, AsTP, Chromatin accessibility complex 17 kDa protein, CHRAC-17, HuCHRAC17, DNA polymerase II subunit 3, DNA polymerase epsilon subunit p17, POLE3, CHRAC17

## Target/Specificity

This POLE3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 5-34 amino acids from the N-terminal region of human POLE3.

## **Dilution**

WB~~1:1000 FC~~1:10~50

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

## **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**

POLE3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## POLE3 Antibody (N-term) - Protein Information



## Name POLE3

## **Synonyms CHRAC17**

**Function** Accessory component of the DNA polymerase epsilon complex (PubMed: 10801849). Participates in DNA repair and in chromosomal DNA replication (By similarity). Forms a complex with CHRAC1 and binds naked DNA, which is then incorporated into chromatin, aided by the nucleosome-remodeling activity of ISWI/SNF2H and ACF1 (PubMed: 10801849). Does not enhance nucleosome sliding activity of the ACF-5 ISWI chromatin remodeling complex (PubMed: 14759371).

# **Cellular Location** Nucleus.

#### **Tissue Location**

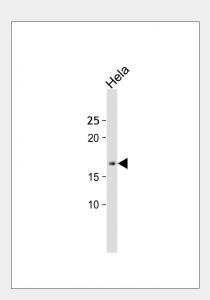
Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.

#### POLE3 Antibody (N-term) - Protocols

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

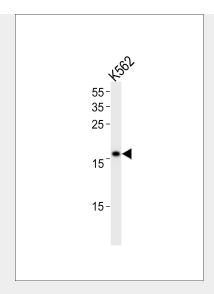
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## POLE3 Antibody (N-term) - Images

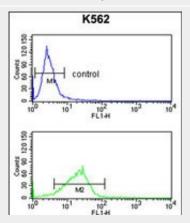


All lanes: Anti-POLE3 Antibody (N-term) at 1:250 dilution + Hela whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 17 KDa Blocking/Dilution buffer: 5% NFDM/TBST.





POLE3 Antibody (N-term) (Cat. #AP7316a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the POLE3 antibody detected the POLE3 protein (arrow).



POLE3 Antibody (N-term) (Cat. #AP7316a) flow cytometry analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## POLE3 Antibody (N-term) - Background

POLE3 is a histone-fold protein that interacts with other histone-fold proteins to bind DNA in a sequence-independent manner. These histone-fold protein dimers combine within larger enzymatic complexes for DNA transcription, replication, and packaging.

## POLE3 Antibody (N-term) - References

Bolognese, F., Imbriano, C. Nucleic Acids Res. 28 (19), 3830-3838 (2000) Li, Y., Pursell, Z.F. J. Biol. Chem. 275 (30), 23247-23252 (2000)