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POLE3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7316a

Product Information

Application	WB, FC, E
Primary Accession	Q9NRF9
Other Accession	Q642A5, Q9JKP7, Q3SZN5
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	16860
Antigen Region	5-34

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.

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.

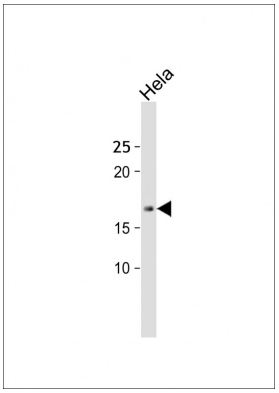
Background

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.

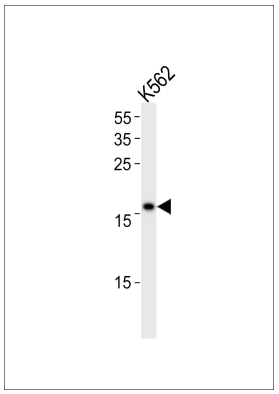
References

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)

Images

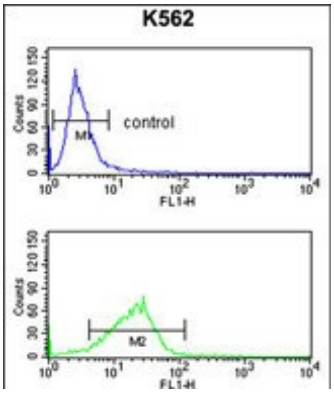


All lanes: Anti-POLE3 Antibody (N-term) at 1:250 dilution + Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 17 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.