



Datasheet for ABIN6243169
anti-POLA1 antibody (AA 1406-1439)



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2 Images

Overview

Quantity:	200 µL
Target:	POLA1
Binding Specificity:	AA 1406-1439
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This POLA1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Immunogen:	This POLA1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1406-1439 amino acids from the human region of human POLA1.
Clone:	RB57637
Isotype:	Ig Fraction
Predicted Reactivity:	H
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	POLA1
Alternative Name:	POLA1 (POLA1 Products)

Target Details

Background: Plays an essential role in the initiation of DNA replication. During the S phase of the cell cycle, the DNA polymerase alpha complex (composed of a catalytic subunit POLA1/p180, a regulatory subunit POLA2/p70 and two primase subunits PRIM1/p49 and PRIM2/p58) is recruited to DNA at the replicative forks via direct interactions with MCM10 and WDHD1. The primase subunit of the polymerase alpha complex initiates DNA synthesis by oligomerising short RNA primers on both leading and lagging strands. These primers are initially extended by the polymerase alpha catalytic subunit and subsequently transferred to polymerase delta and polymerase epsilon for processive synthesis on the lagging and leading strand, respectively. The reason this transfer occurs is because the polymerase alpha has limited processivity and lacks intrinsic 3' exonuclease activity for proofreading error, and therefore is not well suited for replicating long complexes.

Molecular Weight: 165913

UniProt: [P09884](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

Application Details

Application Notes: WB: 1:2000. FC: 1:25

Restrictions: For Research Use only

Handling

Format: Liquid

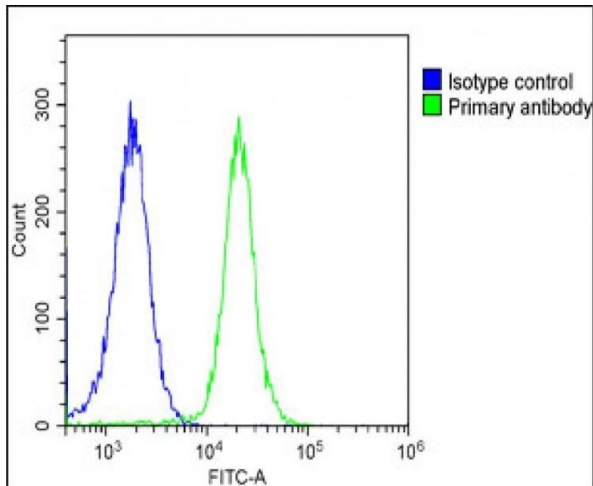
Buffer: Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

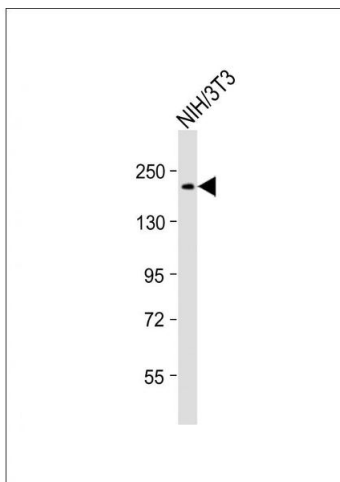
Storage: 4 °C, -20 °C

Expiry Date: 6 months



Flow Cytometry

Image 1. Overlay histogram showing A431 cells stained with (ABIN6243169 and ABIN6578860)(green line). The cells were fixed with 2 % paraformaldehyde and then permeabilized with 90 % methanol for 10 min. The cells were then incubated in 2 % bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37 °C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Western Blotting

Image 2. Anti-POLA1 Antibody (C-Term) at 1:2000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 166 kDa Blocking/Dilution buffer: 5 % NFDm/TBST.