Datasheet for ABIN6258119

anti-POLA1 antibody (N-Term)

2 Images

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Overview

Quantity:	100 µL
Target:	POLA1
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This POLA1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Immunogen:	A synthesized peptide derived from human DNA Polymerase alpha, corresponding to a region within N-terminal amino acids.
Isotype:	IgG
Specificity:	DNA Polymerase alpha Antibody detects endogenous levels of total DNA Polymerase alpha.
Predicted Reactivity:	Pig,Horse
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	POLA1

Target Details

Alternative Name:	POLA1 (POLA1 Products)
Background:	Description: 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. In the cytosol, responsible for a substantial proportion of the physiological concentration of cytosolic RNA:DNA hybrids, which are necessary to prevent spontaneous activation of type I interferon responses (PubMed:27019227). Gene: POLA1
Molecular Weight:	165 kDa
Gene ID:	5422
UniProt:	P09884
Pathways:	SARS-CoV-2 Protein Interactome

Application Details

Application Notes:	WB 1:500-1:1000, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

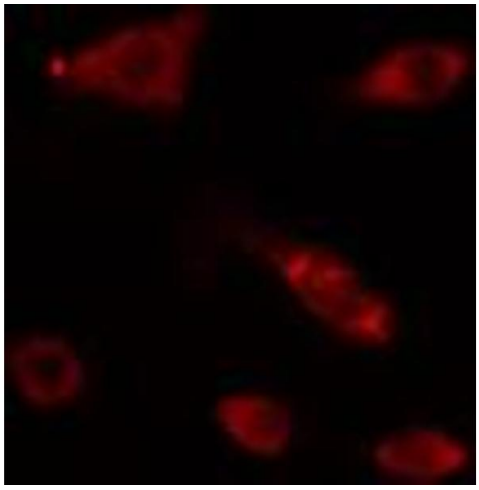
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

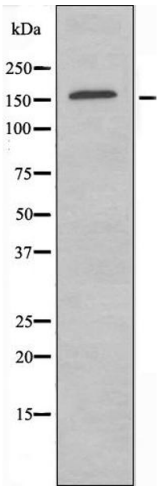
	should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



Immunofluorescence (fixed cells)

Image 1. ABIN6274161 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody(Cat.# S0006), diluted at 1/600, was used as secondary antibody.



Western Blotting

Image 2. Western blot analysis of extracts from Jurkat cells using DNA Polymerase α antibody.