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Datasheet for ABIN7150307

anti-DNA2 antibody (AA 1-300) (Biotin)

Overview

Quantity:	100 µg
Target:	DNA2
Binding Specificity:	AA 1-300
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DNA2 antibody is conjugated to Biotin
Application:	ELISA

Product Details

Immunogen:	Recombinant Human DNA replication ATP-dependent helicase/nuclease DNA2 protein (1-300AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	DNA2
Alternative Name:	DNA2 (DNA2 Products)
Background:	Background: Key enzyme involved in DNA replication and DNA repair in nucleus and

Target Details

mitochondrion. Involved in Okazaki fragments processing by cleaving long flaps that escape FEN1: flaps that are longer than 27 nucleotides are coated by replication protein A complex (RPA), leading to recruit DNA2 which cleaves the flap until it is too short to bind RPA and becomes a substrate for FEN1. Also involved in 5'-end resection of DNA during double-strand break (DSB) repair: recruited by BLM and mediates the cleavage of 5'-ssDNA, while the 3'-ssDNA cleavage is prevented by the presence of RPA. Also involved in DNA replication checkpoint independently of Okazaki fragments processing. Possesses different enzymatic activities, such as single-stranded DNA (ssDNA)-dependent ATPase, 5'-3' helicase and endonuclease activities. While the ATPase and endonuclease activities are well-defined and play a key role in Okazaki fragments processing and DSB repair, the 5'-3' DNA helicase activity is subject to debate. According to various reports, the helicase activity is weak and its function remains largely unclear. Helicase activity may promote the motion of DNA2 on the flap, helping the nuclease function.

Aliases: DNA replication ATP-dependent helicase-like homolog antibody, DNA replication helicase 2 homolog antibody, DNA replication helicase 2, yeast, homolog of antibody, DNA replication helicase 2-like antibody, DNA replication helicase/nuclease 2 antibody, DNA2 antibody, DNA2-like helicase antibody, DNA2L antibody, DNA2L_HUMAN antibody, HDNA2 antibody, KIAA0083 antibody, PEOA6 antibody, SCKL8 antibody

UniProt: [P51530](#)

Pathways: [Telomere Maintenance](#), [DNA Damage Repair](#), [DNA Replication](#), [Synthesis of DNA](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Preservative: 0.03 % Proclin 300
Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4

Preservative: ProClin

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

Handling

Storage: -20 °C, -80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.