

[Go to Product page](#)

Datasheet for ABIN7113558 **anti-DNA2 antibody**

Overview

Quantity:	100 µg
Target:	DNA2
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DNA2 antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Western Blotting (WB)

Product Details

Immunogen:	DNA replication helicase 2 homolog
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

Target Details

Target:	DNA2
Alternative Name:	DNA2 (DNA2 Products)
Background:	Synonyms:DNA2, DNA2L, KIAA0083 Background:Key enzyme involved in DNA replication and DNA repair in nucleus and 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

Target Details

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.

Molecular Weight: 127 kDa

Gene ID: 1763

UniProt: [P51530](#)

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

Application Details

Application Notes: WB: 1:500-1:2000, IHC: 1:50-1:500

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,

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: -20 °C

Storage Comment: -20°C for 12 months (Avoid repeated freeze / thaw cycles.)

Expiry Date: 12 months