

anti- DNA2 antibody

Product Information

Catalog No.:	CAF50498
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	≥95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20 $^{\circ}$ C for 12 months (Avoid repeated freeze / thaw cycles.)

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 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 singlestranded 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.

Immunogen information

Immunogen:	DNA replication helicase 2 homolog
Synonyms:	DNA2, DNA2L, KIAA0083
Observed MW:	127 kDa
Uniprot ID :	P51530

Application

Reactivity:	Human, Rat, Mouse	
Tested Application:	ELISA, WB, IHC	
Recommended dilution: WB: 1:500-1:2000; IHC: 1:50-1:500		



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Immunohistochemistry of paraffin-embedded human colon cancer using CAF50498(DNA2 antibody) at dilution of 1:100



Rat thymus were subjected to SDS PAGE followed by western blot with CAF50498(DNA2 antibody) at dilution of 1:1000.