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DNA2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55536

Specification

DNA2 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC**
Primary Accession	P51530
Reactivity	**Rat, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**120415**

DNA2 Polyclonal Antibody - Additional Information

Gene ID 1763

Other Names
DNA replication ATP-dependent helicase/nuclease DNA2, hDNA2, DNA replication ATP-dependent helicase-like homolog, DNA replication nuclease DNA2, 3.1.-.-, DNA replication ATP-dependent helicase DNA2, 3.6.4.12, DNA2, DNA2L, KIAA0083

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

DNA2 Polyclonal Antibody - Protein Information

Name DNA2

Synonyms DNA2L, KIAA0083

Function
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 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.

Cellular Location
Nucleus. Mitochondrion. Note=Was initially reported to be exclusively mitochondrial (PubMed:18995831). However, it was later shown to localize both in mitochondrion and nucleus (PubMed:19487465).

DNA2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DNA2 Polyclonal Antibody - Images