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DNA polymerase subunit II Rabbit pAb

Catalog # AP97392

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q14181
Other Accession	Q14181
Predicted	Rat, Pig, Human, Mouse, Rabbit, Zebrafish, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65948
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human POLA2
Epitope Specificity	101-200/598
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the DNA polymerase alpha subunit B family.
SUBUNIT	DNA polymerase alpha:primase is a four subunit enzymecomplex, which is assembled throughout the cell cycle, and consistsof the two DNA polymerase subunits A and B, and the DNA primaselarge and small subunits. Subunit B binds to subunit A.
Post-translational modifications	Phosphorylated in a cell cycle-dependent manner, in G2/M phase.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	May play an essential role at the early stage of chromosomal DNA replication by coupling the polymerase alpha/primase complex to the cellular replication machinery.

Additional Information

Gene ID	23649
Other Names	DPOA2_HUMAN; POLA2; DNA polymerase alpha 70 kDa subunit; DNA polymerase alpha 2, accessory subunit; polymerase (DNA directed), alpha 2 (70kD subunit); polymerase (DNA) alpha 2, accessory subunit; DNA polymerase alpha subunit B
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500
Storage	Store at -20 °C 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 °C.

Protein Information

Name	POLA2
Function	Accessory subunit of the DNA polymerase alpha complex (also known as the alpha DNA polymerase-primase complex) which plays an essential role in the initiation of DNA synthesis (PubMed:9705292). During the S phase of the cell cycle, the DNA polymerase alpha complex (composed of a catalytic subunit POLA1, an accessory subunit POLA2 and two primase subunits, the catalytic subunit PRIM1 and the regulatory subunit PRIM2) is recruited to DNA at the replicative forks via direct interactions with MCM10 and WDHD1 (By similarity). The primase subunit of the polymerase alpha complex initiates DNA synthesis by oligomerizing short RNA primers on both leading and lagging strands (By similarity). 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 (By similarity).
Cellular Location	Nucleus.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.