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POLA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17301c

Product Information

Application	WB, E
Primary Accession	Q14181
Other Accession	O89043, Q58D13, NP_002680.2
Reactivity	Human
Predicted	Bovine, Rat, Mouse, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37021
Calculated MW	65948
Antigen Region	212-240

Additional Information

Gene ID	23649
Other Names	DNA polymerase alpha subunit B, DNA polymerase alpha 70 kDa subunit, POLA2
Target/Specificity	This POLA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 212-240 amino acids from the Central region of human POLA2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	POLA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

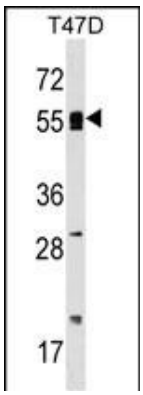
Background

POLA2 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 (By similarity).

References

Michiels, S., et al. Carcinogenesis 30(5):763-768(2009)
Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)
Stelzl, U., et al. Cell 122(6):957-968(2005)
Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)
Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)

Images



POLA2 Antibody (Center) (Cat. #AP17301c) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the POLA2 antibody detected the POLA2 protein (arrow).

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