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GINS1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9494a

Product Information

Application	WB, E
Primary Accession	Q14691
Other Accession	Q9CZ15
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23977
Calculated MW	22988
Antigen Region	1-30

Additional Information

Gene ID	9837
Other Names	DNA replication complex GINS protein PSF1, GINS complex subunit 1, GINS1, KIAA0186, PSF1
Target/Specificity	This GINS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GINS1.
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	GINS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GINS1 (HGNC:28980)
Synonyms	KIAA0186, PSF1

Function	Required for correct functioning of the GINS complex, a complex that plays an essential role in the initiation of DNA replication, and progression of DNA replication forks (PubMed:17417653, PubMed:28414293). GINS complex is a core component of CDC45-MCM-GINS (CMG) helicase, the molecular machine that unwinds template DNA during replication, and around which the replisome is built (PubMed:32453425, PubMed:34694004, PubMed:34700328, PubMed:35585232).
Cellular Location	Nucleus. Chromosome. Note=Associates with chromatin

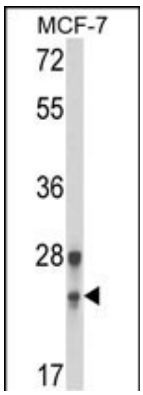
Background

The yeast heterotetrameric GINS complex is made up of Sld5 (GINS4; MIM 610611), Psf1, Psf2 (GINS2; MIM 610609), and Psf3 (GINS3; MIM 610610). The formation of the GINS complex is essential for the initiation of DNA replication in yeast and Xenopus egg extracts (Ueno et al., 2005 [PubMed 16287864]).

References

Nagahama, Y., et al. Cancer Res. 70(3):1215-1224(2010) Kamada, K., et al. Nat. Struct. Mol. Biol. 14(5):388-396(2007)

Images



Western blot analysis of GINS1 Antibody (N-term) (Cat. #AP9494a) in MCF-7 cell line lysates (35ug/lane). GINS1 (arrow) was detected using the purified Pab.

Citations

- Properties of the human Cdc45/Mcm2-7/GINS helicase complex and its action with DNA polymerase epsilon in rolling circle DNA synthesis.
- Interaction between human Ctf4 and the Cdc45/Mcm2-7/GINS (CMG) replicative helicase.

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