

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 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 (<u>HGNC:28980</u>)

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

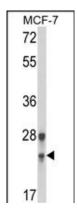
Background

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

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

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