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PSF2 Rabbit pAb

Catalog # AP97634

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9Y248
Other Accession	Q9Y248
Reactivity	Rat
Predicted	Pig, Human, Mouse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21428
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PSF2
Epitope Specificity	101-185/185
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 GINS2/PSF2 family.
SUBUNIT	Component of the GINS complex which is a heterotetramerof GINS1, GINS2, GINS3 and GINS4. Forms a stable subcomplex withGINS3. GINS complex interacts with DNA primase in vitro.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The GINS complex is composed of four subunits, encoded by SLD5, PSF1, PSF2, and PSF3. In S. cerevisiae, it was first identified by genetic and biochemical methods to determine factors interacting with Sld5p. Genetic interactions between these four genes also suggest that they act together. The GINS complex was independently isolated in a large scale screen for cell cycle defects. A similar complex is found in Xenopus and has a ring-like structure. In yeast, all four genes are essential and cells defective in SLD5, PSF1, or PSF2 are impaired in their ability to replicate DNA. The complex localizes to origins of DNA replication and Sld5p was previously implicated as functioning in DNA replication due to its genetic interaction with DPB11. Additional genetic and biochemical interactions of the GINS complex with Dpb11p, Dpb2p, and Sld3p suggest that it functions in some way at the replication fork during DNA synthesis.

Additional Information

Gene ID	51659
Other Names	HSPC037; PSF2; Pfs2; 2210013I18Rik; 4833427B12Rik; RGD1311055; PSF2_HUMAN; GINS2; GINS complex subunit 2; GINS complex subunit 2 (Psf2

	homolog)
Dilution	IHC-P=1:100-500,IHC-F=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	GINS2 (HGNC:24575)
Synonyms	PSF2
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). 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

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