## Geminin / DNA Replication Inhibitor Monoclonal Mouse Antibody (CPTC-GMMN-1)



## **Product Description**

Geminin is a nuclear protein that regulates the initiation of DNA replication during the cell cycle. DNA replication requires the coordinated association of Cdc6 and minichromosome maintenance (MCM) proteins with chromatin. Geminin blocks this assembly of the MCM into the prereplication complex and, in turn, prevents replication from occurring. Expression of Geminin fluctuates throughout the cell cycle with Geminin levels lowest at G1. Throughout S, G2 and M phases, Geminin levels are consistently elevated followed by a decrease during mitosis. The initiation of DNA replication is dependent on the degradation of Geminin during mitosis and the absence of Geminin throughout G1 phase. Geminin degradation is mediated by the anaphasepromoting complex (APC), which specifically targets B-type cyclins and other proteins containing a destruction box motif for degradation by ubiquitinmediated proteolysis. While geminin expression is essential in maintaining chromosomal integrity, it is frequently overexpressed in cancers and evidence suggests that it plays a significant role in tumor proliferation and progression.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2240, Anti-DNA Replication Inhibitor|Geminin (CPTC-GMMN-1)

## Product attributes

Call us: 800-304-5357

Antibody number #2240  Antibody reactivity (target) DNA Replication Inhibitor, Geminin  Antibody type Primary  Host species Mouse  Clonality Monoclonal  Clone CPTC-GMMN-1  Isotype IgG1, kappa  Molecular weight 35 kDa  Synonyms DNA replication inhibitor; Gem; Geminin DNA replication inhibitor; GMMN; RP3 369A17.3  Human gene symbol GMMN  Entrez gene ID 51053  SwissProt O75496
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SwissProt O75496
<b>Unigene</b> 234896
Immunogen Recombinant human full-length protein
Verified antibody IF (verified) applications
Antibody target cellular Nucleus localization
Species reactivity Human
Positive control HEK293, HeLa, MCF-7, Tonsil, Triple-negative breast cancer.
Shipping condition Room temperature
Storage Conditions Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status For research use only (RUO)
Antibody/conjugate formulation Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/m in PBS/0.05% BSA, 0.05% azide, Purified, BSA-free: 1 mg/mL PBS without azide
Validated in protein array Monospecific
Shelf life Guaranteed for at least 24 months from date of receipt when stored as recommended
Product origin  Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Email: btinfo@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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