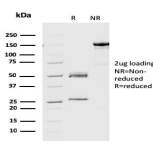


Geminin / DNA Replication Inhibitor Monoclonal Mouse Antibody (CPTC-GMMN-1)



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 order@biotium.com 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

| | |
|---------------------------------------|---|
| 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 |
| Unigene | 234896 |
| Immunogen | Recombinant human full-length protein |
| Verified antibody applications | IF (verified) |
| Antibody target cellular localization | Nucleus |
| 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/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in 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. |

| 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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Product link: <https://biotium.com/product/geminin-dna-replication-inhibitor-monoclonal-mouse-antibody-cptc-gmmn-1/>