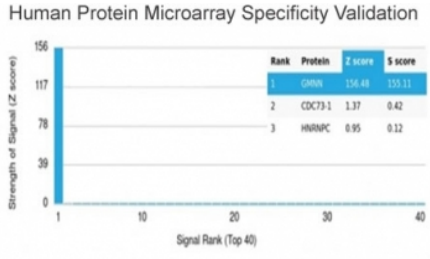
# Recombinant Geminin Antibody / GMNN [clone GMNN/7037R] (V9412)

| Catalog No. | Formulation | Size |
|---|---|---|
| V9412-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V9412-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V9412SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

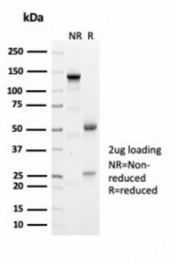
Recombinant RABBIT MONOCLONAL

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Clonality** | Recombinant Rabbit Monoclonal |
| **Isotype** | Rabbit IgG1, kappa |
| **Clone Name** | GMNN/7037R |
| **Purity** | Protein A/G affinity |
| **UniProt** | O75496 |
| **Localization** | Nuclear expression in highly proliferating cells |
| **Applications** | Immunohistochemistry (FFPE) : 1-2ug/ml |
| **Limitations** | This recombinant Geminin antibody is available for research use only. |




Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant Geminin antibody (clone GMNN/7037R). These results demonstrate the foremost specificity of the GMNN/7037R mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.




SDS-PAGE analysis of purified, BSA-free recombinant Geminin antibody (clone GMNN/7037R) as confirmation of integrity and purity.

## 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 anaphase-promoting complex (APC), which specifically targets B-type cyclins and other proteins containing a destruction box motif for degradation by ubiquitin-mediated 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.

## Application Notes

Optimal dilution of the recombinant Geminin antibody should be determined by the researcher.

## Immunogen

A portion of amino acids 71-202 was used as the immunogen for the recombinant Geminin antibody.

## Storage

Aliquot the recombinant Geminin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.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