

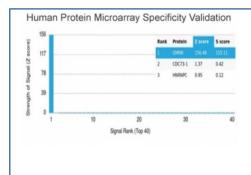
# Recombinant Geminin Antibody / GMNN [clone GMNN/7037R] (V9412)

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

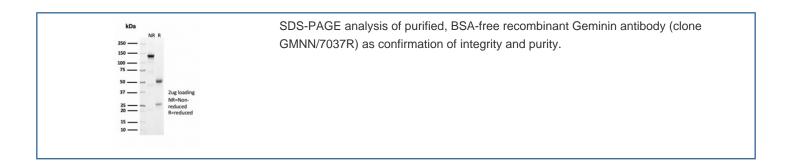
### Recombinant RABBIT MONOCLONAL

# **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.



# **Description**

Recombinant Geminin antibody detects geminin, a cell cycle regulatory protein encoded by the GMNN gene. Geminin is expressed during S, G2, and early M phases of the cell cycle, where it prevents premature DNA replication by inhibiting replication licensing factors. Because of its central role in genome stability and proliferation control, Recombinant Geminin antibody is widely used in oncology, molecular biology, and developmental research.

Geminin functions by binding to Cdt1, a licensing factor required for loading MCM helicases onto DNA origins. This inhibition prevents DNA from being replicated more than once per cycle, thereby maintaining genomic integrity. Degradation of geminin by the anaphase-promoting complex during mitosis resets replication licensing for the next cell cycle. Dysregulated geminin expression is linked to genomic instability and tumorigenesis, highlighting its importance in cancer research.

The Recombinant Geminin antibody clone GMNN/7037R provides specific and reproducible recognition. Recombinant technology ensures lot-to-lot consistency, reducing variability in long-term studies. Clone GMNN/7037R has been cited in peer-reviewed publications examining DNA replication, cell cycle regulation, and tumor biology. Its reproducibility supports immunohistochemistry, Western blotting, and flow cytometry.

Research using clone GMNN/7037R has demonstrated how geminin expression levels correlate with proliferative index in tumors and serve as biomarkers of aggressive cancers. Beyond oncology, this antibody has supported developmental biology research by highlighting how geminin influences differentiation, embryonic stem cell renewal, and neural precursor maintenance. The antibody is a reliable tool for studying both proliferative control and developmental regulation.

NSJ Bioreagents provides this Recombinant Geminin antibody to support oncology, developmental biology, and genome stability studies. Alternate designations include GMNN antibody, DNA replication inhibitor antibody, cell cycle regulatory protein antibody, proliferation marker antibody, and genomic integrity protein antibody.

# **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.