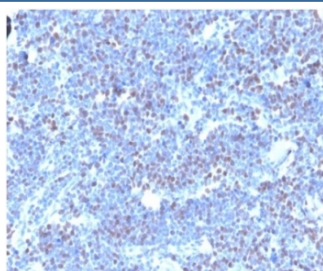


## GMNN Antibody / Geminin [clone GMNN/4033] (V9691)

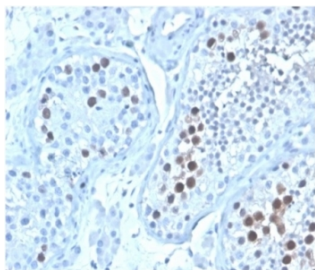
Catalog No.	Formulation	Size
V9691-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9691-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9691SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

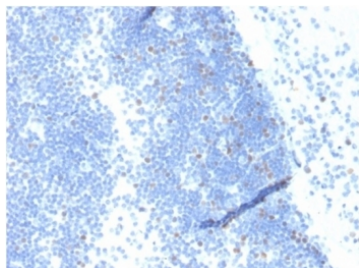
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	GMNN/4033
<b>Purity</b>	Protein A/G affinity
<b>UniProt</b>	O75496
<b>Localization</b>	Nuclear expression in highly proliferating cells
<b>Applications</b>	Immunohistochemistry (FFPE) : 1-2ug/ml
<b>Limitations</b>	This GMNN antibody is available for research use only.



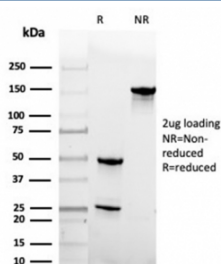
IHC staining of FFPE human thymus with Geminin antibody (clone GMNN/4033). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human testis tissue with GMNN antibody (clone GMNN/4033).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

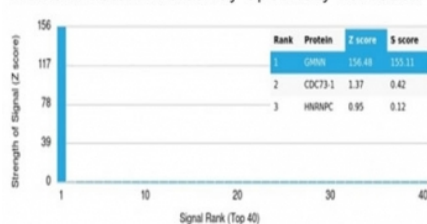


IHC staining of FFPE human lymph node tissue with GMNN antibody (clone GMNN/4033).  
HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free GMNN antibody (clone GMNN/4033) as confirmation of integrity and purity.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using GMNN antibody (clone GMNN/4033). These results demonstrate the foremost specificity of the GMNN/4033 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

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 GMNN antibody should be determined by the researcher.

## Immunogen

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

## Storage

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