

Geminin / DNA Replication Inhibitor Antibody

Mouse Monoclonal Antibody [Clone GMNN/4033]

Catalog No	Format	Size
51053-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
51053-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
51053-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

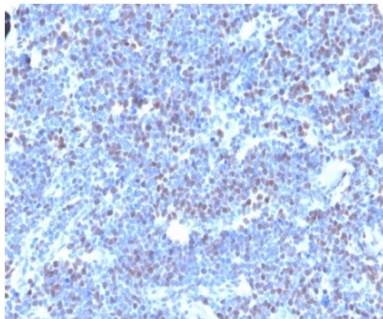
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

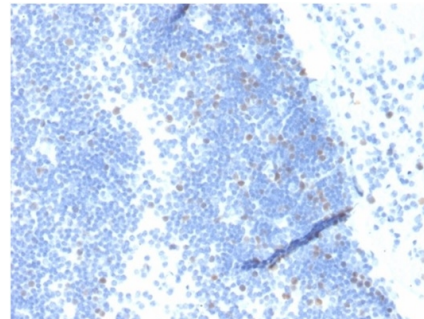
Clone	GMNN/4033
Gene Name	GMNN
Immunogen	Recombinant fragment (around aa71-202) of human GMNN protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	35kDa
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	HEK293, HeLa or MCF-7 cells. Human tonsil, testis or triple-negative breast cancer tissue.

**Optimal dilution for a specific application should be determined.*

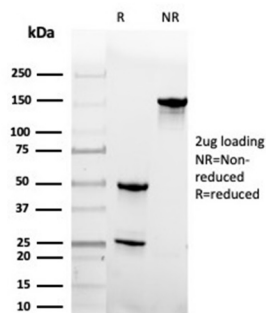
Product Images for Geminin / DNA Replication Inhibitor Antibody



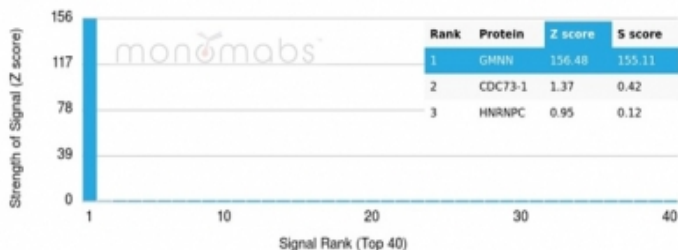
Formalin-fixed, paraffin-embedded human thymus stained with Geminin Mouse Monoclonal Antibody (GMNN/4033).



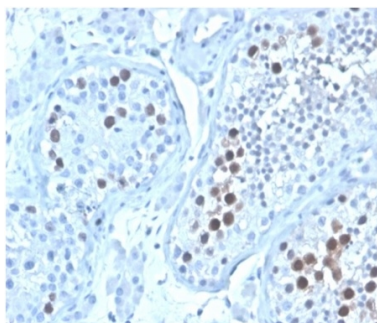
Formalin-fixed, paraffin-embedded human lymph node stained with Geminin Mouse Monoclonal Antibody (GMNN/4033).



SDS-PAGE Analysis Purified Geminin Mouse Monoclonal Antibody (GMNN/4033). Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using Geminin / DNA Replication Inhibitor Monoclonal Antibody (GMNN/4033). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human testis stained with Geminin Mouse Monoclonal Antibody (GMNN/4033).

Specificity & Comments

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Nuclear Marker