

Rabbit GMNN Polyclonal Antibody | anti-GMNN antibody

GMNN Antibody

CATALOG # AAA326973	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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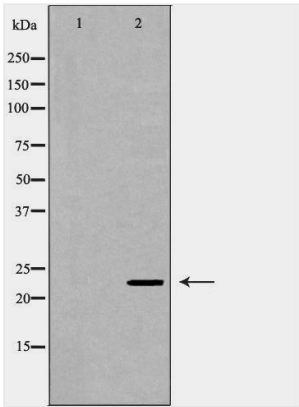
PRODUCT SYNONYMS

GMNN; Polyclonal Antibody; GMNN Antibody; DNA replication inhibitor; Gem; GEMI_HUMAN; Geminin; Geminin DNA replication inhibitor; OTTHUMP00000039393; RP3 369A17.3; anti-GMNN antibody

PRODUCT SPECIFICATIONS

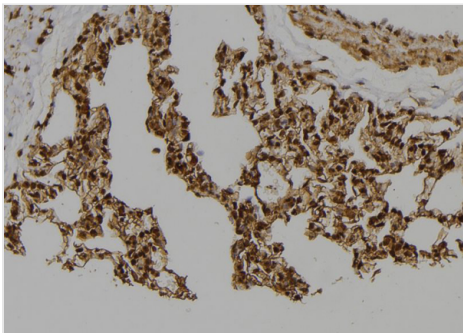
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	GMNN antibody detects endogenous levels of total GMNN
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	209
Applicable Applications for anti-GMNN antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human GMNN
Subcellular Location	Nucleus
Tissue Specificity	Absent during G1 phase, accumulates during S, G2, and M phases, and disappears at the time of the metaphase-anaphase transition.
Predicted Cross Reactivity	Pig, Rabbit
Similarity	Pig (80%), Rabbit (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of HEK293 whole cell lysate, using GMNN Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326973 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-GMNN antibody

Description: This gene encodes a protein that plays a critical role in cell cycle regulation. The encoded protein inhibits DNA replication by binding to DNA replication factor Cdt1, preventing the incorporation of minichromosome maintenance proteins into the pre-replication complex. The encoded protein is expressed during the S and G2 phases of the cell cycle and is degraded by the anaphase-promoting complex during the metaphase-anaphase transition. Increased expression of this gene may play a role in several malignancies including colon, rectal and breast cancer. Alternatively spliced transcript variants have been observed for this gene, and two pseudogenes of this gene are located on the short arm of chromosome 16.

Function: Inhibits DNA replication by preventing the incorporation of MCM complex into pre-replication complex (pre-RC). It is degraded during the mitotic phase of the cell cycle. Its destruction at the metaphase-anaphase transition permits replication in the succeeding cell cycle.

Subunit Structure: Homotetramer. Interacts with CDT1; this inhibits binding of the MCM complex to origins of replication. The complex with CDT1 exists in two forms, a "permissive" heterotrimer and an "inhibitory" heterohexamer. Interacts (via coiled-coil domain) with IDAS (via coiled-coil domain); this targets GMNN to the nucleus. The heterodimer formed by GMNN and MCIDAS has much lower affinity for CDT1 than the GMNN homodimer. Interacts with a subset of Hox proteins, affinity increasing from anterior to posterior types, the strongest interaction being with HOXB1, HOXC9 and HOXD10. Interacts with LRWD1 from G1/S to mitosis.

Post-translational Modifications: Phosphorylated during mitosis. Phosphorylation at Ser-184 by CK2 results in enhanced binding to Hox proteins and more potent inhibitory effect on Hox transcriptional activity.

Similarity: Belongs to the geminin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	354681980
NCBI GeneID	51053
NCBI Accession #	NP_001238918.1
NCBI GenBank Nucleotide #	NM_001251989.1
UniProt Accession #	O75496; Q9H1Z1; B3KMM8
Molecular Weight	Observed: 23 kDa Predicted: 24 kDa
NCBI Official Full Name	geminin
NCBI Official Synonym Full Names	geminin, DNA replication inhibitor
NCBI Official Symbol	GMNN
NCBI Official Synonym Symbols	Gem; MGORS6

NCBI Protein Information	geminin
UniProt Protein Name	Geminin
UniProt Gene Name	GMNN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/gmn-antibody-immunohistochemistry-western-blot-elisa/326973>