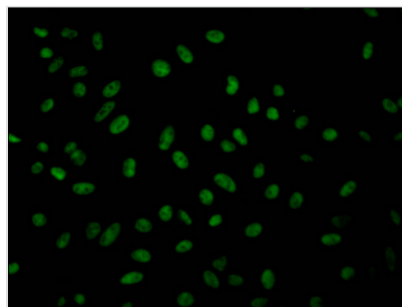




GMNN Antibody

Product Code	CSB-RA585624A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O75496
Immunogen	A synthesized peptide derived from human Geminin
Species Reactivity	Human
Tested Applications	ELISA, IF; Recommended dilution: IF:1:20-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer
Gene Names	GMNN
Accession NO.	8H8

Image



Immunofluorescence staining of HeLa Cells with CSB-RA585624A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

Geminin, encoded by the GMNN gene, is present during the S, G2, and M phases of the cell cycle and is degraded during the metaphase-anaphase transition by the anaphase-promoting complex (APC), which recognizes the destruction box sequence near the 50 ends of the geminin protein. Because reducing Geminin levels reduces Cdt1 accumulation and affects DNA



replication, Geminin is implicated in licensing replication by boosting Cdt1 accumulation in mitosis. Geminin is a master regulator of cell-cycle progression that guarantees that DNA replication begins on time and that it does not repeat itself.

The first step in the preparation of recombinant GMNN antibody is to obtain the GMNN antibody gene. The heavy and light chain genes of the antibody were constructed into a plasma vector and then transfected into suspended mammalian cells transiently. After expression verification, cell supernatant was collected in expanded culture and purified recombinant GMNN antibody was obtained using Affinity-chromatography. This recombinant GMNN antibody has been validated for the detection of GMNN protein from Human in the ELISA, IF.