

Product datasheet for RC232137

OriGene Technologies, Inc.

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Geminin (GMNN) (NM_001251989) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Geminin (GMNN) (NM_001251989) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Geminin

Synonyms: Gem; MGORS6

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC232137 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAATCCCAGTATGAAGCAGAAACAAGAAGAAGAAATCAAAGAGAATATAAAGAATAGTTCTGTCCCAAGAA GAACTCTGAAGATGATTCAGCCTTCTGCATCTGGATCTCTTGTTGGAAGAGAAAATGAGCTGTCCGCAGG CTTGTCCAAAAGGAAACATCGGAATGACCACTTAACATCTACAACTTCCAGCCCTGGGGTTATTGTCCCA GAATCTAGTGAAAATAAAAATCTTGGAGGAGTCACCCCAGGAGTCATTTGATCTTATGATTAAAGAAAATC CATCCTCTCAGTATTGGAAGGAAGTGGCAGAAAAACGGAGAAAAGGGCGCTGTATGAAGCACTTAAGGAAAA TGAGAAACTTCATAAAGAAATTGAACAAAAAGGACAATGAAATTGCCCGCCTGAAAAAGGAGAATAAAGAA CTGGCAGAAGTAGCAGAACATGTACAGTATATGGCAGAGCTAATAGAGAACTGTAGAGAACCTCTGG ATAATTTTGAATCACTGGATAATCAGGAAATTTGATTCTGAAGAAGAAACTGTTGAGGATTCTCTAGTGGA AGACTCAGAAATTGGCACGTGTGCTGAAGGAACTGTATAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC232137 protein sequence

Red=Cloning site Green=Tags(s)

MNPSMKQKQEEIKENIKNSSVPRRTLKMIQPSASGSLVGRENELSAGLSKRKHRNDHLTSTTSSPGVIVP ESSENKNLGGVTQESFDLMIKENPSSQYWKEVAEKRRKALYEALKENEKLHKEIEQKDNEIARLKKENKE LAEVAEHVQYMAELIERLNGEPLDNFESLDNQEFDSEEETVEDSLVEDSEIGTCAEGTVSSSTDAKPCI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV





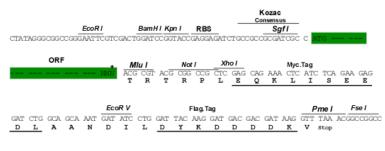
Chromatograms: https://cdn.origene.com/chromatograms/mk6145 b05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM 001251989

ORF Size: 627 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeg: NM 001251989.2

RefSeq Size: 1143 bp RefSeq ORF: 630 bp Locus ID: 51053



UniProt ID: <u>075496</u>

Cytogenetics: 6p22.3

Protein Families: Druggable Genome, Stem cell - Pluripotency

MW: 23.6 kDa

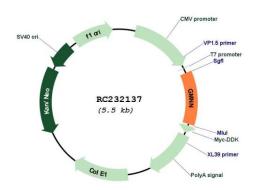
Gene Summary: This gene encodes a protein that plays a critical role in cell cycle regulation. The encoded

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.

[provided by RefSeq, Oct 2011]

Product images:



Circular map for RC232137