

Product datasheet for SC303836

MDM2 (NM_006878) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: MDM2 (NM_006878) Human Untagged Clone

Tag: Tag Free Symbol: MDM2

Synonyms: hdm2; HDMX; MGC5370; MGC71221

Mammalian Cell None

Selection:

Vector: pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_006878 edited

ATGGTGAGGAGCAGGCAAATGTGCAATACCAACATGTCTGTACCTACTGATGGTGCTGTA
ACCACCTCACAGATTCCAGCTTCGGAACAAGAGACCCTGGTTAGACCAAAGCCATTGCTT
TTGAAGTTATTAAAGTCTGTTGGTGCACAAAAAGACACTTATACTATGAAAGAGGTTCTT
TTTTATCTTGGCCAGTATATTATGACTAAACGATTATATGATGAGAAGCAACAACATATT
GTATATTGTTCAAATGATCTTCTAGGAGATTTGTTTGGCGTGCCAAGCTTCTCTGTGAAA
GAGCACAGGAAAATATATACCATGATCTACAGGAACTTGGTAGTAGTCAATCAGCAGGAA
TCATCGGACTCAGGTACAATCTGTGAGTGAGAACAGGTGTCACCTTGAAGGTGGGAGTGAT
CAAAAGGACCTTGTACAAGAGCTTCAGGAAGAAACCTTCATCTTCACATTTGGTTTCT
AGACCATCTACCTCATCTAGAAGGAGAACAATTAGTGAGACAGAAAACCCAAGACAAA
GAAGAGAGTGTGGAATCTAGTTTGCCCCTTAATGCCATTGAACCTTGTGTGATTTGTCAA
GGTCGACCTAAAAAATGGTTGCATTGTCCATGGCAAAACAGGACATCTTATGGCCTGCTTT
ACATGTGCAAAGAAAGCTAAAGAAAAGGAATAAGCCCTGCCCAGTATGTAGACAACCAATT

CAAATGATTGTGCTAACTTATTTCCCCTAG

Restriction Sites: Please inquire **ACCN:** NM_006878

Insert Size: 1200 bp



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

OTI Annotation:

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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.

RefSeq: <u>NM 006878.2</u>, <u>NP 006869.3</u>

RefSeq Size: 1613 bp
RefSeq ORF: 750 bp
Locus ID: 4193
Cytogenetics: 12q15

Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Bladder cancer, Cell cycle, Chronic myeloid leukemia, Endocytosis, Glioma, Melanoma, p53

signaling pathway, Pathways in cancer, Prostate cancer, Ubiquitin mediated proteolysis



Gene Summary:

This gene encodes a nuclear-localized E3 ubiquitin ligase. The encoded protein can promote tumor formation by targeting tumor suppressor proteins, such as p53, for proteasomal degradation. This gene is itself transcriptionally-regulated by p53. Overexpression or amplification of this locus is detected in a variety of different cancers. There is a pseudogene for this gene on chromosome 2. Alternative splicing results in a multitude of transcript variants, many of which may be expressed only in tumor cells. [provided by RefSeq, Jun 2013] Transcript Variant: This variant (MDM2a) is expressed in lympocytes. It lacks an internal coding segment in the 3' region, as compared to variant MDM2. The resulting isoform MDM2a, also known as isoform KB9, lacks a nuclear localization signal and a zf-RanBP region, as compared to isoform MDM2.