

Product datasheet for RC203995

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Midkine (MDK) (NM_001012333) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Midkine (MDK) (NM_001012333) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: Midkine

Synonyms: ARAP; MK; NEGF2

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC203995 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCAGCACCGAGGCTTCCTCCTCCTCACCCTCCTCGCCCTGCTGGCGCTCACCTCCGCGGTCGCCAAAA AGAAAGATAAGGTGAAGAAGGGCGGCCCGGGGAGCGAGTGCGCTGAGTGGGCCTGGGGGCCCTGCACCCC CAGCAGCAAGGATTGCGGCGTGGGTTTCCGCGAGGGCACCTGCGGGGCCCAGACCCAGCGCATCCGGTGC AGGGTGCCCTGCAACTGGAAGAAGAAGGAGTTTGGAGCCGACTGCAAGTACAAGTTTGAGAACTGGGGTGCGT GTGATGGGGGCACCAAAGTCCGCCAAAGCCCAAAGCCCAAAGCCCAAAGCCCAAAGCCCAAAGCCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCCAAAGCAAAGGGAAG GGAAAAGGAC

 ${\sf ACGCGT}$ ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203995 protein sequence

Red=Cloning site Green=Tags(s)

MQHRGFLLLTLLALLALTSAVAKKKDKVKKGGPGSECAEWAWGPCTPSSKDCGVGFREGTCGAQTQRIRC RVPCNWKKEFGADCKYKFENWGACDGGTGTKVRQGTLKKARYNAQCQETIRVTKPCTPKTKAKAKAKKKGK

GKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

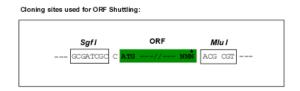
Chromatograms: https://cdn.origene.com/chromatograms/mk6422 d08.zip

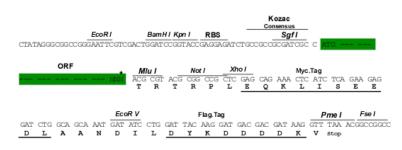




Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM 001012333

ORF Size: 429 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: NM 001012333.2

RefSeq Size: 969 bp RefSeq ORF: 432 bp



Locus ID: 4192 UniProt ID: <u>P21741</u>

Cytogenetics: 11p11.2

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

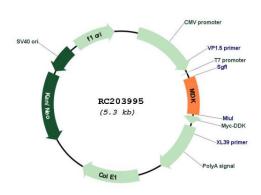
MW: 15.6 kDa

Gene Summary: This gene encodes a member of a small family of secreted growth factors that binds heparin

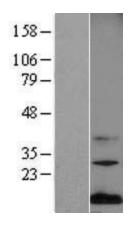
and responds to retinoic acid. The encoded protein promotes cell growth, migration, and angiogenesis, in particular during tumorigenesis. This gene has been targeted as a therapeutic for a variety of different disorders. Alternatively spliced transcript variants

encoding multiple isoforms have been observed. [provided by RefSeq, Jul 2012]

Product images:

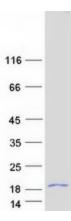


Circular map for RC203995



Western blot validation of overexpression lysate (Cat# [LY423328]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221818] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified MDK protein (Cat# [TP303995]). The protein was produced from HEK293T cells transfected with MDK cDNA clone (Cat# RC203995) using MegaTran 2.0 (Cat# [TT210002]).