

Product datasheet for RC213133

Midkine (MDK) (NM_002391) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Midkine (MDK) (NM_002391) 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 Sequence: >RC213133 representing NM_002391
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCAGCACCGAGGCTTCTCCTCCTCACCTCCTCGCCCTGCTGGCGCTCACCTCCGCGGTGCCCCAAA
 AGAAAGATAAGGTGAAGAAGGGCGGCCGGGGAGCGAGTGCCTGAGTGGGCTGGGGCCCTGCACCCC
 CAGCAGCAAGGATTGCGGCGTGGGTTCCGCGAGGGCACCTGCGGGGCCAGACCCAGCGCATCCGGTGC
 AGGGTGCCTGCAACTGGAAGAAGGAGTTGGAGCCGACTGCAAGTACAAGTTTGAGAACTGGGGTGCCT
 GTGATGGGGGCACAGGCACCAAAGTCCGCCAAGGCACCCTGAAGAAGGGCGCTACAATGCTCAGTGCCA
 GGAGACCATCCGCGTCACCAAGCCCTGCACCCCAAGACCAAAGCAAAGCCAAAGCAAAGAAAGGGAAG
 GGAAAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213133 representing NM_002391
 Red=Cloning site Green=Tags(s)

MQHRGFLLLTLALLALTSAVAKKKDKVKKGGPGSECAEWAWGPCTPSSKDCGVGFREGTCGAQTQRIRC
 RVPENWQKEFGADCKYKFENWACDGGTGTKVRQGLKARYNAQCQETIRVTKPCTPKTKAKAKKGGK
 GKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_002391

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.

RefSeq: [NM_002391.5](#)

RefSeq Size: 866 bp

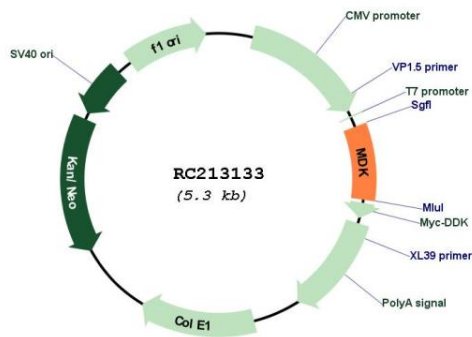
RefSeq ORF: 432 bp

Locus ID: 4192

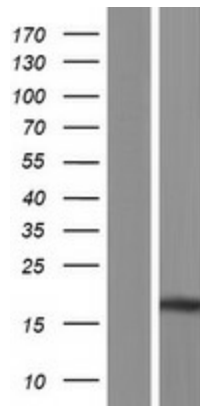
UniProt ID: [P21741](#)

Cytogenetics: 11p11.2
Domains: PTN
Protein Families: Druggable Genome, Secreted Protein, Transmembrane
MW: 15.4 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]

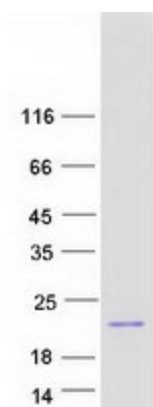
Product images:



Circular map for RC213133



Western blot validation of overexpression lysate (Cat# [LY419358]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213133 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MDK protein (Cat# [TP313133]). The protein was produced from HEK293T cells transfected with MDK cDNA clone (Cat# RC213133) using MegaTran 2.0 (Cat# [TT210002]).