

## Product datasheet for **RC206848**

### **MKRN1 (NM\_013446) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MKRN1 (NM_013446) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MKRN1
Synonyms:	RNF61
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC206848 representing NM\_013446  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCGGAGGCTGCAACTCCCGGAACAACAGCCACAACATCAGGAGCAGGAGCGGCAGCGCGCAGCGCGG  
 CAGCAGCCTCCCCACCCGATCCCCACAGTCACCGCCCGTCCCTGGGGCGGGCGGAGGGGGCGGCGG  
 CAGCGACGGCAGCGCGCGGCTGGACTAACAGGTCACCTGCAGGTATTTATGCATGGGGTTTGTAAAG  
 GAAGGAGACAACGTGCTACTCGCTACTCGCATGACCTCTCTGACAGTCCGTATAGTGTAGTGTGCAAGTATTTTC  
 AGCGAGGGTACTGTATTTATGGAGACCGCTGCAGATATGAACATAGCAAACATTGAAACAGGAAGAAGC  
 AACTGCTACAGAGCTAACTACAAAGTCATCCCTTGCTGCTTCTCAAGTCTCTCATCGATAGTTGGACCA  
 CTTGTTGAAATGAATACAGGCGAAGCTGAGTCAAGAAATCAAACCTTGAACCTGTAGGAGCAGGTTTCAG  
 AGGACTGGGTGAATGCTATTGAGTTTGTCTGGGCAACCCTACTGTGGCCGACTGCGCCTTCTGCAC  
 TGAAGCACCCCTGCAGGGCTCAGTGACCAAGGAAGAATCAGAGAAAGAGCAAACCGCCGTGGAGACAAG  
 AAGCAGCTGTGCCCTATGCTGCAGTGGGAGAGTGCCGATACGGGGAGAAGTGTGTGTATCTCCACGGAG  
 ATCTTTGTGACATGTGTGGGCTGCAGCTCCTGCATCCAATGGATGCTGCCAGAGATCGCAGCATATCAA  
 ATCGTGCATTGAGGCCATGAGAAGGACATGGAGCTCTCATTGCCGTGCAGCGCAGCAAGGACATGGTG  
 TGTGGGATCTGCATGGAGGTGGTCTATGAGAAAGCCAACCCAGTGAGCGCCGCTTCGGGATCCTCTCCA  
 ACTGCAACCACACTACTGTCTCAAGTGCATTGCAAGTGGAGGAGTGCTAAGCAATTTGAGAGCAAGAT  
 CATAAAGTCTGCCAGAATGCCGGATCACATCTAACTTTGTATTCCAAGTGAGTACTGGGTGGAGGAG  
 AAAGAAGAGAAGCAGAACTCATTCTGAAATACAAGGAGGCAATGAGCAACAAGGCGTGCAGTATTTTG  
 ATGAAGGACGTGGGAGCTGCCATTTGGAGGGAAGTGTTTTACAAGCATGCGTACCCTGATGGCCGTAG  
 AGAGGAGCCACAGAGACAGAAAGTGGGAACATCAAGCAGATACCGGGCCCAACGAAGGAACCACTTCTGG  
 GAACTCATTGAGGAAAGAGAGAACAGCAACCCCTTTGACAACGATGAAGAAGAGGTTGTACCTTTGAGC  
 TGGGCGAGATGTTGCTTATGCTTTTGGCTGCAGGTGGGACGACGAACTAACAGACTCTGAAGATGAGTG  
 GGACTTGTTCATGATGAGCTGGAAGATTTTTATGACTTGGATCTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC206848 representing NM\_013446  
 Red=Cloning site Green=Tags(s)

MAEAATPGTTATTSGAGAAAATAAAASPTPIPTVTAPSLGAGGGGGSDGSGGGWTKQVTCRYFMHGVCK  
 EGDNCRYSHDLSDSPYSVVKYFQRGYCIYGDRCRYEHSKPLKQEEATATELTTKSSLAASSLSSIVGP  
 LVEMNTGAEASRNSNFATVAGSEWDVNAIEFVPGQPYCGRTAPSCTEAPLQGSVTKEESEKEQTAVETK  
 KQLCPYAAVGECRYGENCVYLHGDSCDMCGLQLLHPMDAAQRSQHIKSCIEAHEKDMELSFVQRSKDMV  
 CGICMEVVEKANPSERRFGILSNCNHTYCLKCIRKWSAKQFESKIIKSCPECRITSNFVIPSEYWVEE  
 KEEKQKLILKYKEAMSNKACRYFDEGRGSCPFGGNCFYKHAYPDGRREEPQRQKVGTSRYRAQRRNHF  
 ELIEERENSNPFDNDEEEVVFELGEMLLMLLAAGDDELTDSEDEWDLFHDELEDYDLDL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2876\\_e01.zip](https://cdn.origene.com/chromatograms/mg2876_e01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_013446

**ORF Size:** 1446 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\\_013446.2](#), [NP\\_038474.1](#)
**RefSeq Size:** 3116 bp

**RefSeq ORF:** 1449 bp

**Locus ID:** 23608

**UniProt ID:** [Q9UHC7](#)
**Cytogenetics:** 7q34

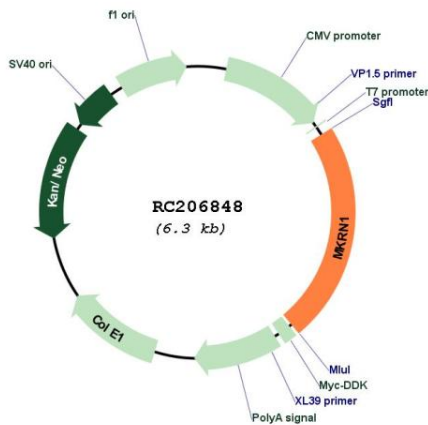
**Domains:** zf-CCCH, RING

**Protein Families:** Druggable Genome

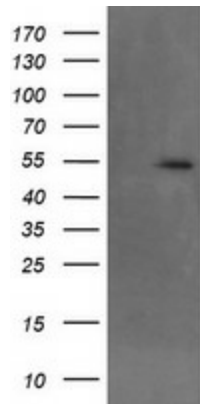
**MW:** 53.2 kDa

**Gene Summary:** This gene encodes a protein that belongs to a novel class of zinc finger proteins. The encoded protein functions as a transcriptional co-regulator, and as an E3 ubiquitin ligase that promotes the ubiquitination and proteasomal degradation of target proteins. The protein encoded by this gene is thought to regulate RNA polymerase II-catalyzed transcription. Substrates for this protein's E3 ubiquitin ligase activity include the capsid protein of the West Nile virus and the catalytic subunit of the telomerase ribonucleoprotein. This protein controls cell cycle arrest and apoptosis by regulating p21, a cell cycle regulator, and the tumor suppressor protein p53. Pseudogenes of this gene are present on chromosomes 1, 3, 9, 12 and 20, and on the X chromosome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Apr 2014]

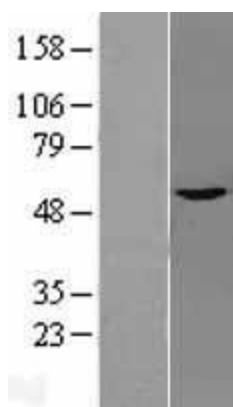
**Product images:**



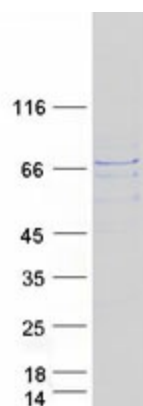
Circular map for RC206848



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MKRN1 (Cat# RC206848, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MKRN1 (Cat# [TA504092]). Positive lysates [LY415580] (100ug) and [LC415580] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415580]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206848 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MKRN1 protein (Cat# [TP306848]). The protein was produced from HEK293T cells transfected with MKRN1 cDNA clone (Cat# RC206848) using MegaTran 2.0 (Cat# [TT210002]).