

Product datasheet for **RC222038**

SUN2 (NM_015374) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUN2 (NM_015374) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUN2
Synonyms:	UNC84B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC222038 representing NM_015374
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTCCCGAAGAAGCCAGCGCCTCACGCGTACTCCAGGGTGACGATGACGGCAGCAGCAGCAGCGGAG
GGAGCTCGGTGGCTGGGAGTCAGAGCACCTGTTTAAAGACAGTCCTCTCAGGACCTTGAAGAGGAAATC
CAGCAACATGAAGCGCCTGTCCCCAGCGCCACAGCTGGGCCCTCTGATGCACACACCTCCTACTAC
AGTGAGTCGCTGGTCCACGAGTCTGGTCCACCCAGGAGCTCCCTGGAGGAACTGCATGGTGACGCCA
ACTGGGGTGAGGACCTGCGGGTGCAGGAGGAGAGGCACGGGTGGCTCAGAGAGCAGCAGGGCCAGCGG
GCTTGTGGGGCGCAAGGCCACCGAGGACTTCTGGGCTTCTCTCGGGTACTCCTCTGAGGACGACTAC
GTGGGCTACTCGGATGTGACCAGCAGAGTTCAGCTCGCGGCTCCGAAGCGCCGCTCACGGGCGGGCT
CCTTACTCTGGATGGTGGCCACTTCGCCAGGCCGGCTTTCAGACTTCTCTACTGGTGGGCTGGCACCAC
CTGGTACCGCCTGACCACAGCTGCCTCCCTCCTTGACGTCTTCGTTTTAACAGGGCGCTTCTCGTCCCTG
AAGACGTTCTCTGGTTCCTGCTGCCGCTGCTCTTGTGACGTGCCTGAGTATGGTGCTTGGTATTCT
ACCCCTATGGGCTGCAGACATCCACCCTGCTTTGGTTTCTGGTGGGCAGCGAAGGACAGCAGGAGGCC
GGATGAGGGCTGGGAAGCCAGAGACTCATCGCCACATTTCCAGGCTGAGCAGCGTGTATGTCCCGGGTA
CACTCTCTGGAGCGCGTCTGGAAGCTTGTGCTGCTGAATTTCTCCAAGTGGCAGAAGGAGGCCATGC
GGCTGGAACGCTGGAGCTGCGGCAAGGGGCTCCTGGCCAGGGAGGTGGTGGTGGCTGAGCCACAGGGA
CACCTGGCGTCTGGAGGGGCTAGTGAGCCCGCTGAAGCTGCCCTGAAGGAGGATTTCCGCAGGGAA
ACTGCTGCTCGCATCCAGGAAGAACTGTCTGCCCTGAGAGCAGAGCATCAGCAAGACTCAGAAGACCTCT
TCAGAAGATCGTCCGGGCTCCAGGAGTCCGAGGCTCGCATCCAGCAGCTGAAGTCAGAGTGGCAAAG
CATGACCCAGGAGTCTTCCAGGAGAGCTGTGAAGGAGCTGAGGCGGCTGGAGGACCAGCTGGCCGGC
CTGCAGCAGGAGCTGGCGCTCTGGCACTGAAGCAGAGCTCGGTGGCGGAAGAAGTGGGCTGCTGCCCC
AGCAGATCCAGGCGTGCAGGACGAGTGAATCTCAGTTCGCGGCTGGATCAGTCAGTTCCTTGCCTG
AGGTGGAGGGGCGCGTGGGCTCCTTCCAGAGAGGAGATGCAAGCTCAGCTGCGAGAGCTGGAGAGC
AAGATCTCACCCATGTGGCAGAGATGCAGGGCAAGTCGGCCAGGGAAGCCGCGGCTCCCTGAGCCTGA
CGCTGCAGAAAGAAGGTGTGATTGGAGTGACAGAGGAGCAGGTGCACCACATCGTGAAGCAGGCCCTGCA
GCGCTACAGTGAGACCGCATCGGGCTGGCAGACTACGCCCTGGAGTCAGGAGGGGCCAGCGTCATCAGC
ACCCGATGTTCTGAGACCTACGAGACCAAGACGGCCCTCCTCAGCCTTTCGGCATCCCCCTGTGGTACC
ACTCCCAGTACCCCGAGTCATCCTCCAGCCAGATGTGACCCAGGCAACTGCTGGGCTTCCAGGGGCC
ACAAGGCTTCGCGTGGTCCGCCTCTGCCCCGATCCGCCCCACAGCCGTTACCTTAGAGCATGTGCC
AAGGCTTGTACCCAACAGCACTATCTCCAGTCCCCCAAGGACTTCGCCATCTTTGGGTTTGACGAAG
ACCTGCAGCAGGAGGGGACACTCCTTGGCAAGTCACTTACGATCAGGACGGCGAGCCTATTAGACGTT
TCACTTTCAGGCCCTACGATGGCCAGTACCAGGTGGTGGAGCTGCGGATCCTGACTAACTGGGGCCAC
CCCAGTACACCTGCATCTACCGCTTCCAGAGTGCATGGGAGCCCCGCCAC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC222038 representing NM_015374
 Red=Cloning site Green=Tags(s)

MSRRSQRLTRYSGDDDDGSSSSGGSSVAGSQSTLFKDSPLRTLKRKSSNMKRLSPAPQLGPSSDAHTSY
 SESLVHESWFPFRSSLEELHGDANWGEDLVRVRRRGTGGSESSRASGLVGRKATEDFLGSSSGYSSDDY
 VGYSVDVQSSSSRLRSVSRAGSLLWMVATSPGRLFRLLYWWAGTTWYRLTTAASLLDVFVLTTRFSSL
 KTFLWFLPLLLLLTCLTYGAWFYYPYGLQTFHPALVSWWAAKDSRRPDEGWEARDSSPHFQAEQVRMSRV
 HSLERRLEALAAEFSSNQKEAMRLERLELRQGAPGQGGGGGLSHEDTLALLEGLVSRREAALKEDFRRE
 TAARIQEELSALRAEHQDSEDLFKKIVRASQSEARIQQLKSEWQSMQESFQESSVKELRRLEDQLAG
 LQQELAALALKQSSVAEEVGLLPQQIQAVRDDVESQFPAWISQFLARGGGGRVGLLQREEMQAQLRELES
 KILTHVAEMQGSAREAAASLSLTLQKEGVIQVTEEQVHHIVKQALQRYSEDRIGLADYALESGGASVIS
 TRCSETYETKTALLSLFGIPLWYHSQSPRVILQPDVHPGNCWAFQGPQGFVAVRLSARIRPTAVTLEHVP
 KALSPNSTISSAPKDFAIFFGDEDLQEGTLLGKFTYDQDGEPIQTFHFQAPTMATYQVVELRILTNWGH
 PEYTCIYRFRVHGEPAH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4071_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_015374

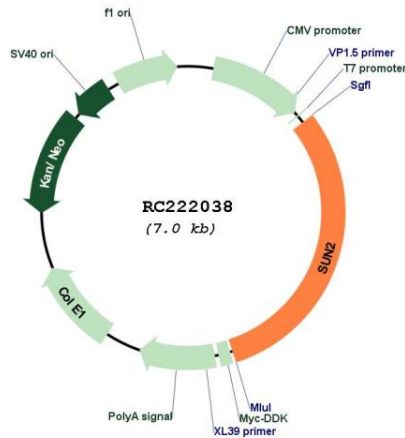
ORF Size: 2151 bp

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](#)

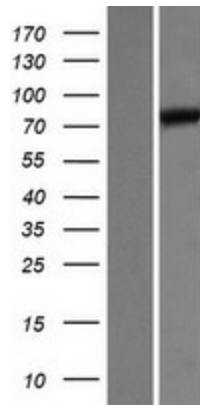
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none">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_015374.3
RefSeq Size:	3908 bp
RefSeq ORF:	2154 bp
Locus ID:	25777
UniProt ID:	Q9UH99
Cytogenetics:	22q13.1
Protein Families:	Transmembrane
MW:	80.1 kDa
Gene Summary:	SUN1 (MIM 607723) and SUN2 are inner nuclear membrane (INM) proteins that play a major role in nuclear-cytoplasmic connection by formation of a 'bridge' across the nuclear envelope, known as the LINC complex, via interaction with the conserved luminal KASH domain of nesprins (e.g., SYNE1; MIM 608441) located in the outer nuclear membrane (ONM). The LINC complex provides a direct connection between the nuclear lamina and the cytoskeleton, which contributes to nuclear positioning and cellular rigidity (summary by Haque et al., 2010 [PubMed 19933576]).[supplied by OMIM, Nov 2010]

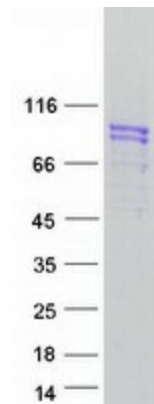
Product images:



Circular map for RC222038



Western blot validation of overexpression lysate (Cat# [LY414592]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222038 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SUN2 protein (Cat# [TP322038]). The protein was produced from HEK293T cells transfected with SUN2 cDNA clone (Cat# RC222038) using MegaTran 2.0 (Cat# [TT210002]).