

Product datasheet for **RC202532**

Mesothelin (MSLN) (NM_005823) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mesothelin (MSLN) (NM_005823) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mesothelin
Synonyms:	MPF; SMRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202532 representing NM_005823.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
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ATGGCCTTGCCAACGGCTCGACCCTGTTGGGGTCTGTGGGACCCCGCCCTCGGCAGCCTCCTGTTC
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TGTGCGGAGGTGTCCGGCTGAGCACGGAGCGTGTCCGGGAGCTGGCTGTGGCCTTGGCACAGAAGAT
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TTCTTCTCCGCATCACGAAGGCCAATGTGGACCTGCTCCGAGGGGGCTCCGAGCGACAGCGGCTG
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CCCCCTACGGCCCCCTCGACATGGTCTGTCTCCACGATGGACGCTCTGCGGGGCTGTGCCGGTG
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ACGCCCTGCCTCCTAGGACCTGGACCTGTTCTACCGTCTGGCACTGCTCTAGCTCCACCCTGGCC
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TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
```

Protein Sequence:

>Peptide sequence encoded by RC202532
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MALPTARPLLGSCGTPALGSLFLFLSLGWVQPSRTLGETGQAAPLDGVLANPPNISSLSPRQLLGFP
CAEVSGLSTERVRELAVALAQKNVKLSTEQLRCLAHRLSEPPEDLDALPLDLLFLNPDAFSGPQACTR
FFSRITKANVDLLPRGAPERQRLPAALACWVGRSLLSEADVRLGGLACDLGRFVAESAELLPRL
VSCPGPLDQDQEAARAALQGGPPYGGPSTWSVSTMDALRLLPVLGQPIIRSIPQIVAAWRQRSSR
DPSWRQPRTLPRFRREVEKTACPSGKKAREIDESLIFYKWELEACVDAALLATQMDRVNAIPFTY
EQLDVLKHKLDELTPQGYPEVSIQHLGYLFLKMSPEDIRKWNVTLETALKALLEVNKGHEMSPQVATLI
DRFVKGRGQLDKDTLDTLTAFYPGYLCSLSPEELSSVPPSSIWAVRPQDLTCDPRQLDVLVYPKARLAF
QNMNGSEYFVKIQSFLGGAPTELDKALSQQNVSMDLATFMKLRTDAVPLPLTVAEVQKLLGPHVEGLKAE
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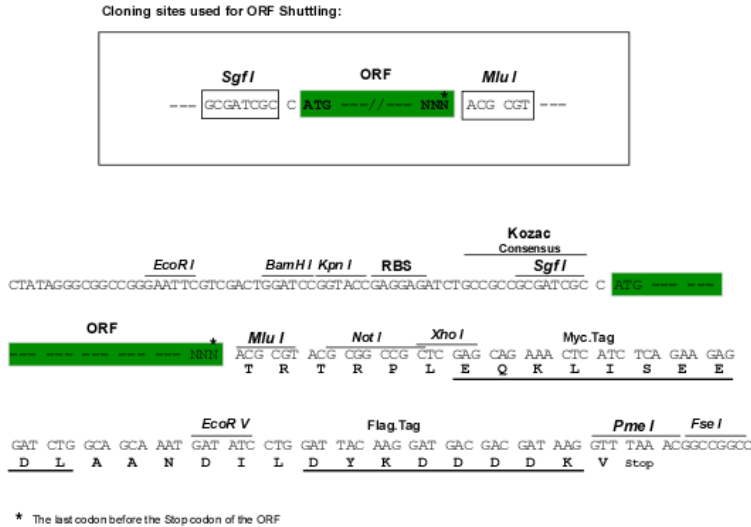
Recombinant protein using RC202532 also available, [TP302532](#)

Chromatograms:

https://cdn.origene.com/chromatograms/mk6150_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005823

ORF Size: 1863 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_005823.6](#)

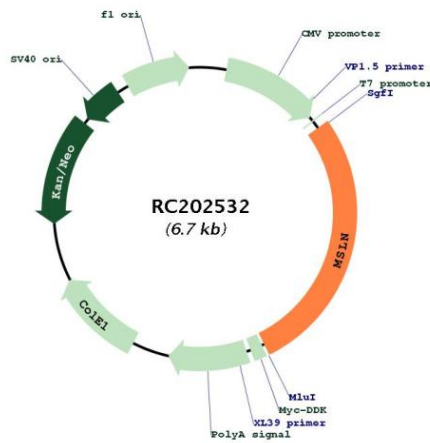
RefSeq Size: 2197 bp

RefSeq ORF: 1869 bp

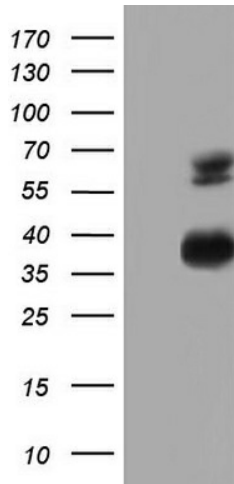
Locus ID: 10232
UniProt ID: [Q13421](#)
Cytogenetics: 16p13.3
Protein Families: Druggable Genome, Secreted Protein, Transmembrane
MW: 67.9 kDa

Gene Summary: This gene encodes a preproprotein that is proteolytically processed to generate two protein products, megakaryocyte potentiating factor and mesothelin. Megakaryocyte potentiating factor functions as a cytokine that can stimulate colony formation of bone marrow megakaryocytes. Mesothelin is a glycosylphosphatidylinositol-anchored cell-surface protein that may function as a cell adhesion protein. This protein is overexpressed in epithelial mesotheliomas, ovarian cancers and in specific squamous cell carcinomas. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

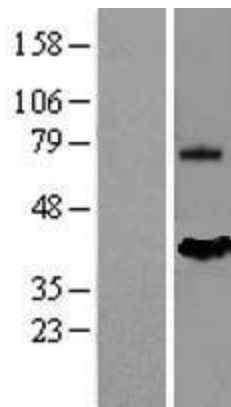
Product images:



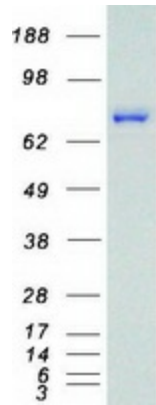
Circular map for RC202532



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MSLN (Cat# RC202532, 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-MSLN (Cat# [TA805169]). Positive lysates [LY401768] (100ug) and [LC401768] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401768]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202532 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MSLN protein (Cat# [TP302532]). The protein was produced from HEK293T cells transfected with MSLN cDNA clone (Cat# RC202532) using MegaTran 2.0 (Cat# [TT210002]).