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Product datasheet for RC219757

Mesothelin (MSLN) (NM_013404) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mesothelin (MSLN) (NM_013404) 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:

>RC219757 representing NM_013404
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTTGCCAACGGCTCGACCCCTGTTGGGGTCCTGTGGGACCCCCGCCCTCGGCAGCCTCCTGTTCC
TGCTCTTCAGCCTCGGATGGGTGCAGCCCTCGAGGACCCTGGCTGGAGAGACAGGGCAGGAGGCTGCGCC
CCTGGACGGAGTCCTGGCCAACCCACCTAACATTTCCAGCCTCTCCCCTCGCCAACTCCTTGGCTTCCCG
TGTGCGGAGGTGTCCGGCCTGAGCACGGAGCGTGTCCGGGAGCTGGCTGTGGCCTTGGCACAGAAGAATG
TCAAGCTCTCAACAGAGCAGCTGCGCTGTCTGGCTCACCGGCTCTCTGAGCCCCCCGAGGACCTGGACGC
CCTCCCATTGGACCTGCTGCTATTCCTCAACCCAGATGCGTTCTCGGGGCCCCAGGCCTGCACCCGTTTC
TTCTCCCGCATCACGAAGGCCAATGTGGACCTGCTCCCGAGGGGGGCTCCCGAGCGACAGCGGCTGCTGC
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CCTGGCTTGCGACCTGCCTGGGCGCTTTGTGGCCGAGTCGGCCGAAGTGCTGCTACCCCGGCTGGTGAGC
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ACGGCCCCCCGTCGACATGGTCTGTCTCCACGATGGACGCTCTGCGGGGCCTGCTGCCCGTGCTGGGCCA
GCCCATCATCCGCAGCATCCCGCAGGGCATCGTGGCCGCGTGGCGGCAACGCTCCTCTCGGGACCCATCC
TGGCGGCAGCCTGAACGGACCATCCTCCGGCCGCGGTTCCGGCGGGAAGTGGAGAAGACAGCCTGTCCTT
CAGGCAAGAAGGCCCGCGAGATAGACGAGAGCCTCATCTTCTACAAGAAGTGGGAGCTGGAAGCCTGCGT
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AGGATTTGAAGGCGCTCAGTCAGCAGAATGTGAGCATGGACTTGGCCACGTTCATGAAGCTGCGGACGGA
TGCGGTGCTGCCGTTGACTGTGGCTGAGGTGCAGAAACTTCTGGGACCCCACGTGGAGGGCCTGAAGGCG
GAGGAGCGGCACCGCCCGGTGCGGGACTGGATCCTACGGCAGCGGCAGGACGACCTGGACACGCTGGGGC
TGGGGCTACAGGGCGGCATCCCCAACGGCTACCTGGTCCTAGACCTCAGCATGCAAGAGGCCCTCTCGGG
GACGCCCTGCCTCCTAGGACCTGGACCTGTTCTCACCGTCCTGGCACTGCTCCTAGCCTCCACCCTGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219757 representing NM_013404
Red=Cloning site Green=Tags(s)

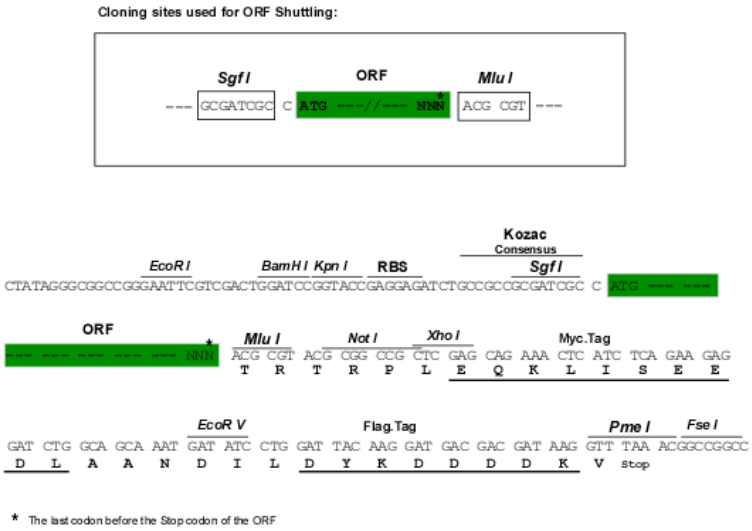
MALPTARPLLGSCGTPALGSLLFLLFSLGWVQPSRTLAGETGQEAAPLDGVLANPPNISSLSPRQLLGFP
CAEVSGLSTERVRELAVALAQKNVKLSTEQLRCLAHRLSEPPEDLDALPLDLLLFLNPDAFSGPQACTRF
FSRITKANVDLLPRGAPERQRLLPAALACWGVRGSLLSEADVRALGGLACDLPGRFVAESAEVLLPRLVS
CPGPLDQDQQEAARAALQGGGPPYGPPSTWSVSTMDALRGLLPVLGQPIIRSIPQGIVAAWRQRSSRDPS
WRQPERTILRPRFRREVEKTACPSGKKAREIDESLIFYKKWELEACVDAALLATQMDRVNAIPFTYEQLD
VLKHKLDELYPQGYPESVIQHLGYLFLKMSPEDIRKWNVTSLETLKALLEVNKGHEMSPQAPRRPLPQVA
TLIDRFVKGRGQLDKDTLDTLTAFYPGYLCSLSPEELSSVPPSSIWAVRPQDLDTCDPRQLDVLYPKARL
AFQNMNGSEYFVKIQSFLGGAPTEDLKALSQQNVSMDLATFMKLRTDAVLPLTVAEVQKLLGPHVEGLKA
EERHRPVRDWILRQRQDDLDTLGLGLQGGIPNGYLVLDLSMQEALSGTPCLLGPGPVLTVLALLLASTLA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg5001_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013404

ORF Size: 1890 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.

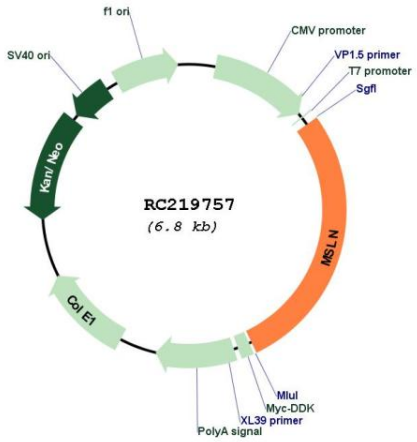
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_013404.4

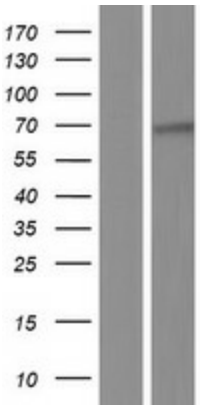
RefSeq Size: 2076 bp

RefSeq ORF:	1893 bp
Locus ID:	10232
UniProt ID:	Q13421
Cytogenetics:	16p13.3
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
MW:	68.99 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 RC219757



Western blot validation of overexpression lysate (Cat# [LY415604]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219757 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).