

Product datasheet for **RC206544**

SEMA4F (NM_004263) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4F (NM_004263) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEMA4F
Synonyms:	M-SEMA; m-Sema-M; PRO2353; S4F; SEMAM; SEMAW
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC206544 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCGGCCTCTGCTGCGCGGCCCGCCGGTCCCGGGCAGCCTACAGCCTCGCCCTTCCCGCTACTGC
TGCTGGCGGTGCTGAGCGGCCCGGTATCCGGCCCGTCCCGCGCTCGGTGCCAGAACCTCGCTTCCAAT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RC206544 protein sequence
Red=Cloning site Green=Tags(s)

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MPASAARPRPGGQPTASPFPLLLLAVLSGPVSGRVPRSVPRTSPLPISEADSCLTRFAVPHTYNYSVLLV
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DWIRTDTLPSWLNAPAFVAVALSPAEWGDEDDGDEIYFFFTETSRAFDSYERIKVPRVARVCAGDLGGR
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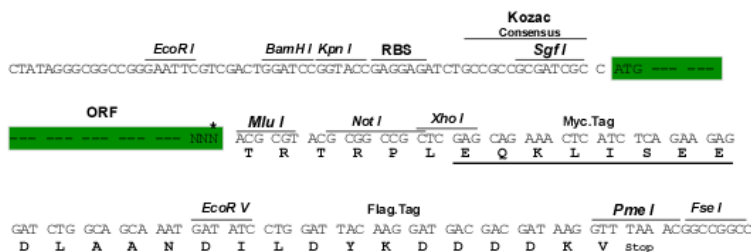
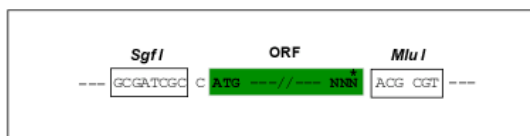
TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6834_a04.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_004263

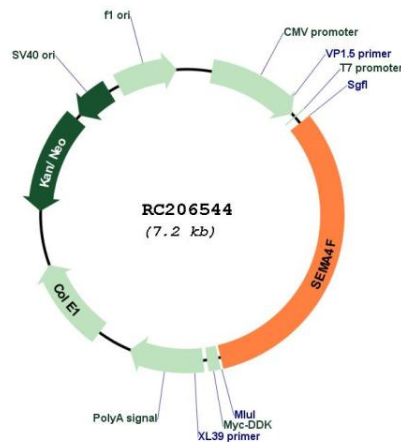
ORF Size: 2310 bp

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](#)

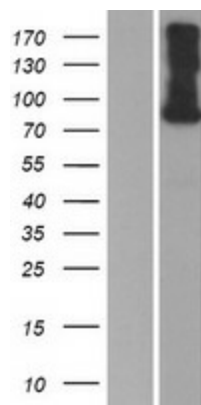
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_004263.5</u>
RefSeq Size:	6122 bp
RefSeq ORF:	2313 bp
Locus ID:	10505
UniProt ID:	<u>O95754</u>
Cytogenetics:	2p13.1
Domains:	Sema, PSI, PSI
Protein Families:	Transmembrane
Protein Pathways:	Axon guidance
MW:	83.5 kDa
Gene Summary:	This gene encodes a transmembrane class IV semaphorin family protein, which plays a role in neural development. This gene may be involved in neurogenesis in prostate cancer, the development of neurofibromas, and breast cancer tumorigenesis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2012]

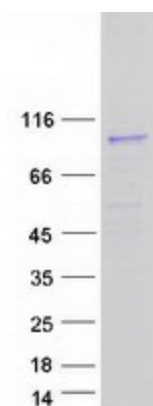
Product images:



Circular map for RC206544



Western blot validation of overexpression lysate (Cat# [LY418105]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206544 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SEMA4F protein (Cat# [TP306544]). The protein was produced from HEK293T cells transfected with SEMA4F cDNA clone (Cat# RC206544) using MegaTran 2.0 (Cat# [TT210002]).