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Product datasheet for RC222035

SEMA3G (NM_020163) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA3G (NM_020163) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEMA3G
Synonyms:	sem2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC222035 representing NM_020163
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCCCTCGGCCTGGGCCATTTGCTGGCTGCTAGGGGGCCTCCTGCTCCATGGGGGTAGCTCTGGCC
CCAGCCCCGGCCCCAGTGTGCCCCGCCTGCGGCTCTCCTACCGAGACCTCCTGTCTGCCAACCGCTCTGC
CATCTTTCTGGGCCCCCAGGGCTCCCTGAACCTCCAGGCCATGTACCTAGATGAGTACCGAGACCGCCTC
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GAGGTTTTCAACGGGCCCTTTGCCCACCGAGATGGGCCTCAGCACCAGTGGGGGCCCTATGGGGGCAAGG
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CAAGGACTACCCAGATGAGGTGCTGCAGTTTGCCCGAGCCCACCCCCTCATGTTCTGGCCTGTGCGGCCT
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CCAACACCTATCACCGAAATGGAGATCTCTGTCAAAAGGCAAATGCTATACGTGGGCTCTCGGCTGGGTG
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GAGCACAATCGGACGCCCCGGGAGGTGGAGGCCACG

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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222035 representing NM_020163
Red=Cloning site Green=Tags(s)

MAPSAWAICWLLGGLLLHGGSSGPSPGPSVPRLRLSYRDLLSANRSAIFLGPQGSLNLQAMYLDEYRDRL
FLGGLDALYSLRLDQAWPDPREVLWPPQPGQREECVRKGRDPLTECANFVRVLQPHNRTHLLACGTGAFQ
PTCALITVGHRGEHVLHLEPGSVESGRGRCPHEPSRPFASTFIDGELYTGLTADFLGREAMIFRSGGPRP
ALRSDSDQSLLHDPRFVMAARIPENSDQDNDKVYFFFSETVPSPDGGSNHVTVSRVGRVCVNDAGGQRVL
VNKWSTFLKARLVCSVPGPGGAETHFDQLEDVFLLWPKAGKSLEVYALFSTVSAVFQGFAVCVYHMADIW
EVFNGPFAHRDGPQHQWGPYGGKVPFPRPGVCPSKMTAQPGRPFGSTKDYPDEVLQFARAHPLMFWPVRP
RHGRPVLVKTHLAQQLHQIVVDRVEAEDGTYDVIFLGTDSGSVLKVIALQAGGSAEPEEVVLEELQVFKV
PTPITEMEISVKRQMLYVGSRLGVAQLRLHQCETYGTACAECCLARDPYCAWDGASCTHYRPSLGKRRFR
RQDIRHGNPALQCLGQSQEEEAVGLVAATMVYGTEHNSTFLECLPKSPQAAVRWLLQRPGDEGPDQVKTD
ERVLHTERGLLFRRLSRFDAGTYTCTTLEHGFSQTVVRLALVVIVASQLDNLFPPEPKPEEPPARGGLAS
TPPKAWYKDILQLIGFANLPRVDEYCERVWCRGTTECSGCFRSRSRGKQARGKSWAGLELGKKMKSRVHA
EHNRTPREVEAT

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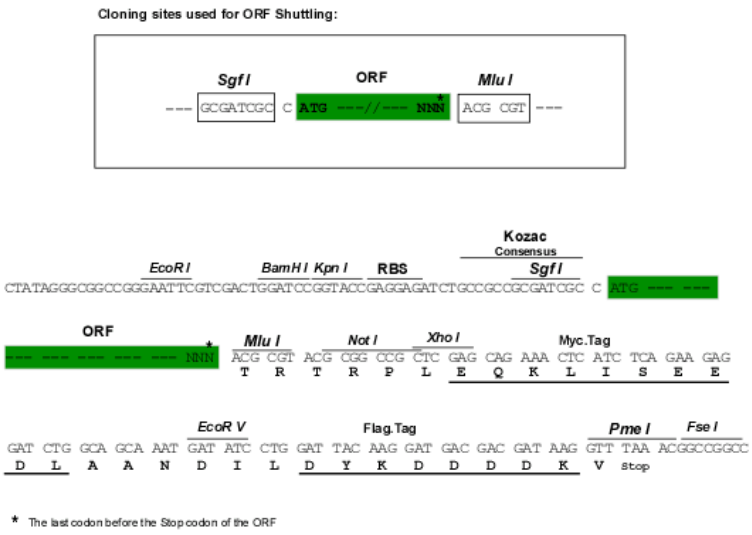
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_020163
ORF Size:	2346 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_020163.3

RefSeq Size: 4700 bp

RefSeq ORF: 2349 bp

Locus ID: 56920

UniProt ID: Q9NS98

Cytogenetics: 3p21.1

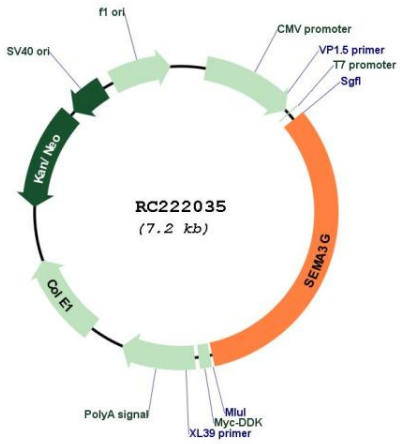
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Axon guidance

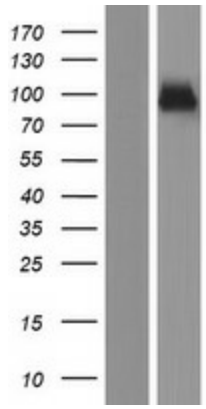
MW: 86.5 kDa

Gene Summary: The transcription of this gene is activated by PPAR-gamma, and the resulting protein product plays a role in endothelial cell migration. Expression of this gene also inhibits tumor cell migration and invasion. [provided by RefSeq, Jul 2016]

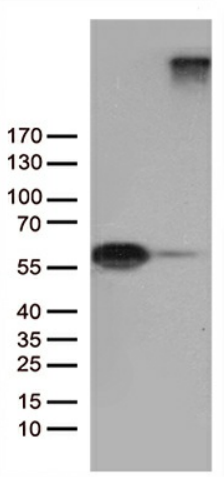
Product images:



Circular map for RC222035



Western blot validation of overexpression lysate (Cat# [LY412627]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222035 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SEMA3G (Cat# RC222035, 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-SEMA3G (Cat# [TA811391]). Positive lysates [LY412627] (100ug) and [LC412627] (20ug) can be purchased separately from OriGene.