

Product datasheet for **RG228520**

Semaphorin 7a (SEMA7A) (NM_001146029) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 7a (SEMA7A) (NM_001146029) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Semaphorin 7a
Synonyms:	CD108; CDw108; H-SEMA-K1; H-Sema-L; JMH; SEMAK1; SEMAL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG228520 representing NM_001146029
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACGCCTCTCCGCCCGACGTGCCGCCCCAGCGCACCGCGCCCGCTCCCTGGCCCGCGGCTC
 GGTGGGGCTTCCGCTGCGGCTGCGGCTGCTGCTGCTCTGGGCGGCCCGCCCTCCGCCAGGGCCA
 CCTAAGGAGCGGACCCCGCATCTTCGCCGTCTGGAAAGGCCATGTAGGGCAGGACCGGTGGACTTTGGC
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 AGGTCTACCTCTTTGACTTCCCCGAGGGCAAGAACGCATCTGTGCGCACGGACTGCGAGAATACTACAC
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 TGTGCCCTGGCCGCTCCCTCTGGCTGGGGTGTGCCACACTCACTCTTGGCTTGTGGTCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG228520 representing NM_001146029
 Red=Cloning site Green=Tags(s)

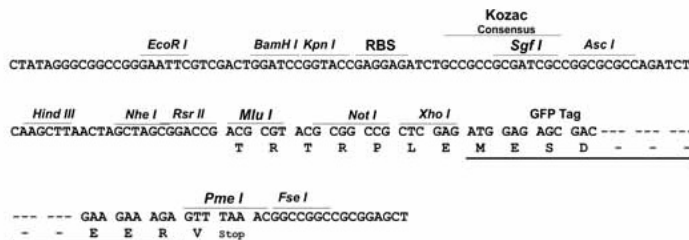
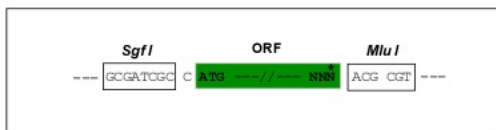
MTPPPPGRAAPSAPRARVPGPPARLGLPLRLRLLLLLWAAAASAQGHLSGPRIFAVWKGHVQDRVDFG
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 KCLPDQPIPTETFQVADRHPEVAQRVEPMGPLKTPLFHSKYHYQKVAVHRMQASHGETFHVLYLTDRG
 TIHKVVEPGEQHSFAFNIMEIQPFRAAAIQTMSLDAERRKLYVSSQWEVSQVPLDLCEVYGGGCHGCL
 MSRDPYCGWDQGRCSISYSSERSVLQSNPAEPHKECPNPKPKAPLQKVS LAPNSRYLSCPMSERHAT
 YSWRHKENVEQSCEPGHQSPNCILFIENLTAQQYGHYFCEAQEGSYFREAQHWQLLPEDGIMAEHLLGHA
 CALAASLWLGVLPTLTLGLLVH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001146029

ORF Size: 1956 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_001146029.3](#)

RefSeq Size: 3351 bp

RefSeq ORF: 1959 bp

Locus ID: 8482

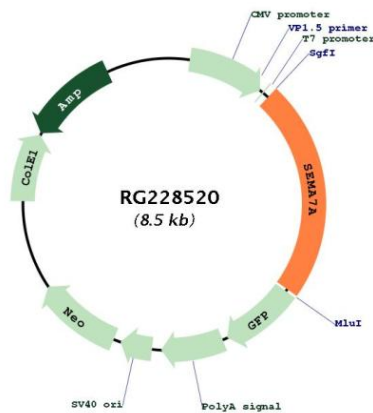
UniProt ID: [O75326](#)

Cytogenetics: 15q24.1

Protein Pathways: Axon guidance

Gene Summary: This gene encodes a member of the semaphorin family of proteins. The encoded preproprotein is proteolytically processed to generate the mature glycosylphosphatidylinositol (GPI)-anchored membrane glycoprotein. The encoded protein is found on activated lymphocytes and erythrocytes and may be involved in immunomodulatory and neuronal processes. The encoded protein carries the John Milton Hagen (JMh) blood group antigens. Mutations in this gene may be associated with reduced bone mineral density (BMD). 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 RG228520