

## Product datasheet for **RG216518**

### Plexin D1 (PLXND1) (NM\_015103) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plexin D1 (PLXND1) (NM_015103) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLXND1
Synonyms:	PLEXD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216518 representing NM_015103 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCCTCGCGCCGGGGCGGCACCCCTTAGCGCCGGGCCCGCCGAGCCCCCGCGTTCC  
AGACGCCCGCGGTGCCGGTCCGCTGCTGTTGCTGCTGCTCCTGGGGCGGCGGGGCCCGCCCT  
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GTTCAACACCAATGTGGCCATGGCAGAGATTTATAAGTACGCCAAGAGGTATCGGCCGAGATCATGGCC  
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TGGAGGACAACATCTACGAGTGCTACAGTGAGGCC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG216518 representing NM\_015103

Red=Cloning site Green=Tags(s)

MAPRAAGGAPLSARAAAAAPPPFQTPPRCPVPLLLLLLLGAARAGALEIQRFPSPPTNNFALDGAAGT  
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RGDLYSRLVSVFPARERLFAVFERPQGSAAARAAPAALCAFRFADVRAAIRAARTACFVEPADVVAVLD  
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TDMTDLTKELNRSQGIPLFLEYKHFVTRTFPPKCSSLYEERYVLPSTLNSQSSQAQETHPLLGEWKIPE  
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LNEEWLLRENIEAKPRNLNVSFQCGGMDLSVRAMDTDLTQVKEKILEAFCKNPVYSQWPRAEDVDLEW  
FASSTQSYILRDLDDTSVVEDGRKKLNTLAHYKIPEGASLAMSLLIDKKDNTLGRVKDLDTKEYFHLVLP  
DELAEPKSHRQSHRKKVLPPIYLTRLLSTKGTQLKFLDDLKAILSIREDKPPLAVKYFFDFLEEQA EK  
RGISDPDLHIWKTNLPLRFWVNLKNPQVFVDIDKTDHIDACL SVIAQAFIDACSISDLQLGKDSPTN  
KLLYAKEIPEYRKIVQRYKQIQDMTPLSEQEMNAHLAEESRKYQNEFNTNVAMAEIYKYAKRYPQIMA  
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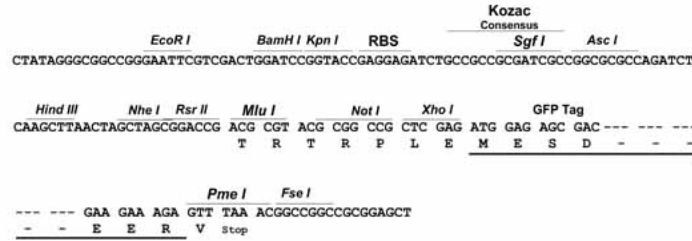
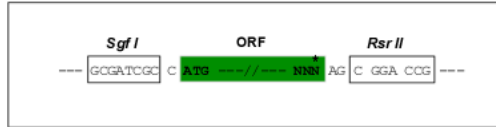
SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

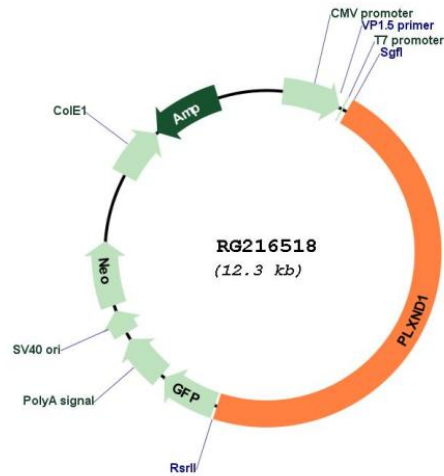
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM\_015103

ORF Size: 5775 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_015103.1</a> , <a href="#">NP_055918.1</a>
<b>RefSeq Size:</b>	7095 bp
<b>RefSeq ORF:</b>	5778 bp
<b>Locus ID:</b>	23129
<b>UniProt ID:</b>	<a href="#">Q9Y4D7</a>
<b>Cytogenetics:</b>	3q22.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	Cell surface receptor for SEMA4A and for class 3 semaphorins, such as SEMA3A, SEMA3C and SEMA3E. Plays an important role in cell-cell signaling, and in regulating the migration of a wide spectrum of cell types. Regulates the migration of thymocytes in the medulla. Regulates endothelial cell migration. Plays an important role in ensuring the specificity of synapse formation. Required for normal development of the heart and vasculature (By similarity). Mediates anti-angiogenic signaling in response to SEMA3E.[UniProtKB/Swiss-Prot Function]