

## Product datasheet for **RG238626**

### DNA polymerase mu (POLM) (NM\_001284330) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA polymerase mu (POLM) (NM_001284330) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POLM
Synonyms:	Pol Mu; Tdt-N
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG238626 representing NM\_001284330.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
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CTCACAGCCTGGCGCGCTCCAAAGGCTTCCCGCTCCTTGACGCCTGCAGCTCCGAAGCGACACATGTT
GTGATGGAAGAGACCTCAGCAGAGGAGCCGTCAGCTGGCAGGAGCGCAGGATGGCAGCTGCTCCCCCG
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CCTGTGGAGTGCCGGCACCCTGGAGGTGGTGGCCAAAGGAAGGGCCCTGAGCCCAGCATGGATG
CCTGCCTATGCCTGCCAGCGCCCTACGCCCTCACACACCACAACACTGGCCTCTCCGAGGCTCTGGAG
ATACTGGCCGAGGAGCAGGCTTTGAAGGCAGTGAGGGCCGCTCCTCACCTTCTGCAGAGCAGCCTCG
GTGCTCAAGGCCCTTCCAGCCCTGTACAACCCTGAGCCAGCTGCAGGGGCTTCCCACCTTTGGAGAA
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TCAGAGAGGGCTCCAGCACACCAGGACCTGAGCACCCAGTCCCTGCGGTCCGATGTAGATGCCCTGCA
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AGCCACATGGACGCTTTTGAGAGAAGTTTCTGCATTTTCCGCCTACCACAACCTCCAGGGGCTGCTGTG
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CAGTTCCTTTCCGCTGCTCGTTGGACTGGCTCCAAGCTTTTCCAGCGGGAGCTGCGCCGCTTCCAGC
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CCCCACTTCCACTCAGGAAATTGGGCTGCCCCAACTGGCCACTGAATGTCTCCAGGCAGATATGCTG
CCCCCTGACCCCACTTCAACCCTCCCGCCAAGGCCTGGCTCTCCGAGGTCAATTGTGCCTGCAG
GATCAGTTGAGCCCTGCTGGTGTGCTGCAGGCTGTGATGAGGTGGGAGCCCTCAGTGCCAGCCTCATC
ACTGTG
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAAAC
```

**Protein Sequence:**

>Peptide sequence encoded by RG238626  
 Blue=ORF Red=Cloning site Green=Tag(s)

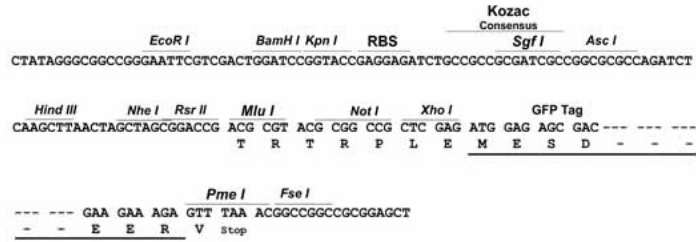
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MLPKRRRARVGSPPGDAASSTPPSTRFPGVAIYLVEPRMGRSRRRAFLTGLARSKGFRVLDAACSEATHV
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PAYACQRPTPLTHHNTGLSEALEILAEAGFEGSEGRLLTFCRAASVLKALPSPVTLSQLQLPHFGE
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QFFPALLGWTGSKLFQRELRRFSRKEKGLWLNHGLFDPEQGSSSGKTPRSRKSFCRRHF SKRLQRK
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DQLSPCWAAGCDEVGALSASLITV
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
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```

**Restriction Sites:**

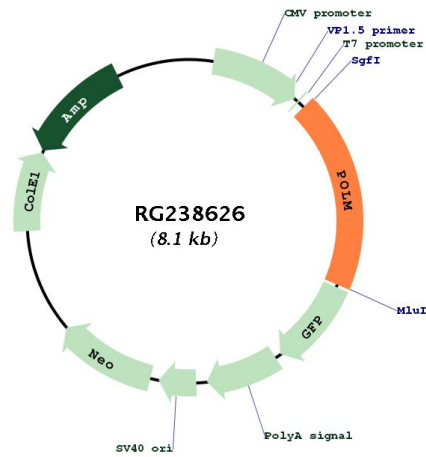
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_001284330
<b>ORF Size:</b>	1524 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>RefSeq:</b>	<a href="#">NM_001284330.2</a>
<b>RefSeq Size:</b>	2638 bp
<b>RefSeq ORF:</b>	1527 bp
<b>Locus ID:</b>	27434
<b>UniProt ID:</b>	<a href="#">Q9NP87</a>
<b>Cytogenetics:</b>	7p13
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Non-homologous end-joining
<b>MW:</b>	55.5 kDa
<b>Gene Summary:</b>	Gap-filling polymerase involved in repair of DNA double-strand breaks by non-homologous end joining (NHEJ). Participates in immunoglobulin (Ig) light chain gene rearrangement in V(D)J recombination.[UniProtKB/Swiss-Prot Function]