

Product datasheet for **MG205599**

Plod1 (BC010268) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plod1 (BC010268) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plod1
Synonyms:	Plod, LH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205599 representing BC010268 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGCAGACCTGTGCCGTCAGGACCAAACCTGCACCTACTACTTCAGTGTGGATGCTGATGTGGCTC
TGACGGAGCCGAACAGCCTAAGGCTCCTGATTGAACAAAACAAGAATGTCATTGCGCCACTCATGACCCG
CCACGGGAGGCTCTGGTCCAACCTTTGGGGGGTCTGAGTGCAGATGGTACTACGCCGCTCAGAGGAC
TACGTGGACATTGTGCAGGGCCGTCGTGTGGCGTCTGGAACGTGCCTTACATCTCAAACATCTACCTGA
TCAAGGGCAGTGCCTGCGGGCTGAAGTGCAGAACGTAGACCTTTCCACTACAGCAAGCTGGATTCCGA
CATGAGTTTCTGCGCCAATGTCCGACAGCAGGAGGTTCATGTTCTGACCAACCGGCACACCTTTGGC
CACCTGCTTTCCCTGGATAACTACCAGACCACCCACCTACATAATGATCTCTGGGAGGTGTTTCAGCAACC
CTGAGGACTGGAAAGAAAAGTACATCCATGAGAATTACACCAAGGCCCTGGCGGGGAAGCTGGTGGAGAC
GCCTTGTCCGGATGTCTACTGGTTCATCTTCCAGGAGCGGCCTGTGATGAGCTGGTGGAGGAGATG
GAACACTATGGCCAGTGGTCTCTGGGTGATAATAAGGACAACCGGATCCAGGGTGGCTACGAAAACGTGC
CCACTATCGACATCCATATGAACCAGATCACCTTCGAGCGGGAGTGGCACAAGTTCTGGTGGAGTACAT
CGCCCCATGACAGAGAAGCTGTACCCTGGCTACTACACTAGGGCCAGTTTGATCTAGCCTTTGTCGTC
CGCTATAAGCCTGATGAGCAGCCTTCTTGATGCCCCACCATGACGCCTTACCTTACCCTCAACATAG
CCCTGAACAGGGTTGGGGAAGATTATGAGGGCGGAGGTTGCCGATTTCTGCGCTACAACCTGCTCCGTGAG
GGCACCAGGAAGGGCTGGGCCCTCCTGCACCCGGGGCGGCTCACACACTATCATGAGGGCTTCTACT
ACCAAGGGCACGCGCTACATTGCTGTGCTTTCTGTCGATCCC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205599 representing BC010268
 Red=Cloning site Green=Tags(s)

MGADLCRQDQCTYYFSVDADVALTEPNLSRLLLIEQKNVIAPLMTRHGRLWSNFWGGLSADGYYARSED
 YVDIVQGRRVGVWNPYISNIYLKGSALRAELQNVDLFHYSKLDSDMSFCANVRQQEVFMFLTNRHTFG
 HLLSLDNYQTTHLHNDLWEVFSNPEDWKEKYIHENYTKALAGKL VETPCPDVYWFPIFTEAACDELVEEM
 EHYGQWSLGDNDNRIQGGYENVPTIDIHMNQITFEREWHKFLVEYIAPMTEKLYPGYYTRAQFDLAFVV
 RYKPDEQPSLMPHHDASTFTVNIALNRVGEDYEGGGRFLRYNCSYRAPRKGWALLHPGRLTHYHEGLPT
 TKGTRYIAVSFVDP

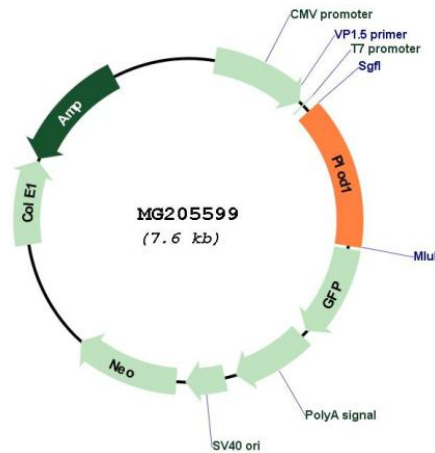
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC010268

ORF Size:	1094 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:	BC010268 , AAH10268
RefSeq Size:	1903 bp
RefSeq ORF:	1094 bp
Locus ID:	18822
Cytogenetics:	4 78.57 cM
Gene Summary:	Part of a complex composed of PLOD1, P3H3 and P3H4 that catalyzes hydroxylation of lysine residues in collagen alpha chains and is required for normal assembly and cross-linking of collagen fibrils (PubMed:27119146). Forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in collagens (By similarity). These hydroxylysines serve as sites of attachment for carbohydrate units and are essential for the stability of the intermolecular collagen cross-links (PubMed:27119146).[UniProtKB/Swiss-Prot Function]