

Product datasheet for **MG221703**

Plod2 (NM_001142916) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plod2 (NM_001142916) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plod2
Synonyms:	D530025C14Rik; LH2; Plod-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG221703 representing NM_001142916
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGGGACCGCGGAGCGAGGCCGGGGCGGCTGATGCCCATGCTCGCCCTGCTCTCTGGGCGGCCGCC
TGGCGTGGCGGAGGAGACGCCGGCGCATCCCTGCAGATAAAATTATTAGTCATAACTGTCGCAACAAA
AGAAAATGATGGATTCCACAGATTTATGAATTCAGCCAAGTATTTCAATTACACTGTGAAGTTCTTGGT
CAAGGTCAAGGAGTGGAGAGGCGGTGATGGAATGAACAGTATCGGAGGGGCCAGAAGGTGAGATTACTGA
AAGAAGCTATGGAGCACTACGCCAGTCAGGAAGATCTGGTCATCTTGTACCAGTGTGGTGTGTTGT
ATTTGCTGGTGGCCTGAAGAAGTTCTTAAAAAGTTCCAAAAGACAAATCATAAAATCGTCTTGCAGCG
GACGGGCTGCTGTGGCCAGATAAGCGGCTGGCAGACAAGTACCCTGTTGTGCACATTGGGAAACGCTACC
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TAATGATGATGATCAGCTCTTTACACGAAAGTTACATCGACCCACTGAAGAGGGAAGCTTTAACATC
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AAAATGGTAAAAGCAGAGTGAAGAATACATTTTATGAAACACTGCCAGTGGAATTAATGAAAATGGGCC
CACCAAGATTCTCCTGAATTACTTTGAAAATGTTTCCAAACTCATGGACACAGGAAAATGGCTGTGCG
CTTTGTGATGTTGACACAATTGACTTGTCTACAGTAGATGTCCCTCCCAAGGTTACACTGGGTGTTTTTA
TTGAACAACCAACCCCTTTCTACCTCGATTCTGAACTTACTGTTAACACTGGATTATCCCAAAGAAGC
CCTTCAACTCTTTATTCATAATAAAGAAGTTTATCATGAAAAGGACATCAAAGTGTGGTATAAAGCT
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TGGGCATGGATTTCTGCCGTGAGGATGAAAAGTGTGATTACTACTTTAGTGTGGATGCAGATGTTGTTTT
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CATGAAAAGTTGTGTTCCAATTTTGGGAGCACTGAGTCTGATGGGACTATGCTCGCTCTGAAGATT
ACGTGGATATTGTTACAGGGAAACAGAGTAGGAATCTGGAATGTCCATATATGGTAATGTGACTTAAT
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CAGATGCTTCTGGTTTCCCATATTTTCTGAACGAGCCTGTGATGAGTTGGTAGAAGAAATGGAGCATT
TGGCAAGTGGTCCGGCGGAAAGCATCACGATAGCCGCATATCGGGTGGTTATGAAAATGTCCCGACTGAC
GATATTATATGAAGCAGATCGGGCTGGAGAATGTTTGGCTTCATTTATCCGAGAGTTCATTGCTCCAG
TCACACTGAAGGTCTTCGAGGCTATTATACAAAGGATTTGCACTGCTGAATTTGTAGTAAAGTACTC
ACCTGAAAGACAGCGCTCGCTCCGTCACCACGATGCCTCAACCTTTACCATCAACATTGCTCTGAAT
AATGTAGGAGAGGATTTTCAAGGAGGTGGATGCAAATTTCTGAGGTATAATTGCTCCATTGAGTCCCCAC
GAAAAGGCTGGAGCTTCATGCATCCTGGGAGGCTCACACATTTGCACGAAGGACTTCTGTAAAAATGG
AACACGATACATTGCAGTGCATTTATAGATCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG221703 representing NM_001142916
 Red=Cloning site Green=Tags(s)

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MGDRGARPGRLMPMLALLSWAAGLGVAEETPGRIPADKLLVITVATKENDGFHRFMNSAKYFNFTVKVLG
QGQEWRRGGDMNSIGGGQKVRLLKEAMEHYASQEDLVILFTECFDVVFAGGPEEVLKFKQKTNHKKIVFAA
DGLLWDPKRLADKYPVVHIGKRYLNSGGF IGYAPYISRLVQQWNLQDNDLQFLYTKVYIDPLKREAFNI
TLDHKCKIFQALNGATDEVVLKFENGKSRVKNTFYETLPVAINGNGPTKILLNYFGNYVPSWTQENGCA
LCDVDTIDLSTVDVPPKVTLGVFIEQPTPFLPRFLNLLLTLDPYKPEALQLFIHNKEVYHEKDIKVFVDKA
KHDISSIKIVGPEENLSQAEARNMGMDFCRQDEKCDYFVSDADVVLTNPRTLKFLIEQNRKIIAPLVTR
HGKLSNFWGALSPDGYARSEDYVDIVQGNRVIWNPYMANVYLIQGKTLRSEMNERNYFVRDKLDPD
MALCRNARDMTLQREKDSPTPETFQMLSPPKGVFMYISNRHEFGRLISTANYNTSHLNNDFWQIFENPVD
WKEYINRDYSKIFTENIVEQPCPDVFWFPIFSERACDELVEEMEYHGKWSGGKHHDSRISGGYENVPTD
DIHMKQIGLENVLHFIREFIAPVTLKVFAGYYTKGFALLNFWVKYSPERQSLRPHHDASTFTINIALN
NVGEDFQGGGCKFLRYNCSIESPRKGSFMHPGRLTHLHEGLPVKNGTRYIAVSFIDP
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001142916

ORF Size: 2274 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_001142916.1](#), [NP_001136388.1](#)

RefSeq Size: 3719 bp

RefSeq ORF: 2277 bp

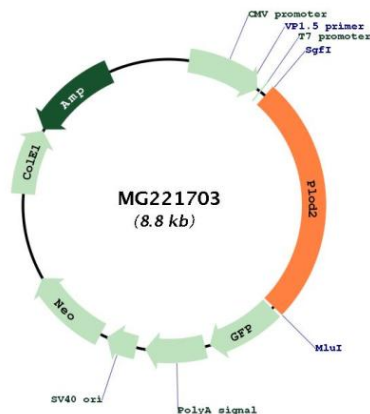
Locus ID: 26432

UniProt ID: [Q9R0B9](#)

Cytogenetics: 9 48.4 cM

Gene Summary: Forms hydroxylysine residues in -Xaa-Lys-Gly- sequences in collagens. These hydroxylysines serve as sites of attachment for carbohydrate units and are essential for the stability of the intermolecular collagen cross-links.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG221703