

Product datasheet for **MR221703**

Plod2 (NM_001142916) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plod2 (NM_001142916) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plod2
Synonyms:	D530025C14Rik; LH2; Plod-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR221703 representing NM_001142916
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGGACCGCGGAGCGAGGCCGGGGCGGCTGATGCCCATGCTCGCCCTGCTCTCTGGGCGGCCGGCC
 TGGCGTGGCGGAGGAGACGCCCGGCGCATCCCTGCAGATAAAATTATTAGTCATAACTGTCGCAACAAA
 AGAAAATGATGGATTCCACAGATTTATGAATTCAGCCAAGTATTTCAATTACACTGTGAAGTTCTTGGT
 CAAGGTCAGGAGTGGAGAGGCGGTGATGGAATGAACAGTATCGGAGGGGGCCAGAAGGTGAGATTACTGA
 AAGAAGCTATGGAGCACTACGCCAGTCAGGAAGATCTGGTCATCTTGTACCAGTGTGGTGTGTTG
 ATTTGCTGGTGGCCTGAAGAAGTTCTTAAAAAGTTCCAAAAGACAAATCATAAAATCGTCTTTCAGCG
 GACGGGCTGCTGTGGCCAGATAAGCGGCTGGCAGACAAGTACCCTGTTGTGCACATTGGGAAACGCTACC
 TGAATTCGGAGGCTTTATTGGCTATGCCCGTACATCAGCCGTCTGGTCCAGCAGTGAATCTGCAGGA
 TAATGATGATGATCAGCTCTTTACACGAAAGTTACATCGACCCACTGAAGAGGGAAGCTTTAACATC
 AACTGGATCACAAATGCAAAATTTCCAGGCCTGAATGGAGCTACAGATGAAGTTGTTTTAAAGTTTG
 AAAATGGTAAAAGCAGAGTGAAGAATACATTTTATGAAACACTGCCAGTGGAATTAATGAAAATGGGCC
 CACCAAGATTCTCCTGAATTACTTTGAAAATGTTTCCAAACTCATGGACACAGGAAAATGGCTGTGCG
 CTTTGTGATGTTGACACAATTGACTTGTCTACAGTAGATGTCCCTCCCAAGGTTACACTGGGTGTTTTTA
 TTGAACAACCAACCCCTTTCTACCTCGATTCTGAACCTACTGTTAACACTGGATTATCCCAAAGAAGC
 CCTTCAACTCTTTATTCATAATAAAGAAGTTTATCATGAAAAGGACATCAAAGTGTGGTATAAAGCT
 AAGCATGACATCAGCTCTATAAAAATAGTAGGACCAGAGGAGAACCTAAGTCAAGCAGAAGCCAGGAACA
 TGGGCATGGATTCTGCCGTGAGGATGAAAAGTGTGATTACTACTTTAGTGTGGATGCAGATGTTGTTTT
 GACAAACCAAGAAGCTTTAAAATTTTGTATTGAACAAAACAGGAAAATCATTGCTCCTCTGTGACACGT
 CATGAAAAGTTGTGTTCCAACCTTTGGGGAGCACTGAGTCTGATGGGTAATGCTCGCTGAAAGATT
 ACGTGGATATTGTTACAGGGGAACAGAGTAGGAATCTGGAATGTCCATATATGGTAATGTGTAATAAT
 TCAAGGAAAGACACTCCGATCTGAGATGAATGAAAGGAATTTTTGTCCGTGATAAGTTGGATCCCGAT
 ATGGCTCTTGGCCGAATGCTAGAGATGACCTTACAAAGGGAAAAGACTCCCTACTCCGAAAACAT
 TCCAAATGCTCAGCCCCCAAAGGGTGTGTTTATGTACATTTCTAACAGACATGAATTTGGACGGCTGAT
 ATCAACTGCTAATTACAACACTCCCATCTTAAACATGACTTCTGGCAGATTTTTGAAAATCCCGTGGAT
 TGAAGGAAAAATATATAAATCGTGATTATTCAAAGATTTTCACTGAAAATATAGTCGAGCAGCCTGTGC
 CAGATGCTTCTGGTTTCCCATATTTTCTGAACGAGCCTGTGATGAGTTGGTAGAAGAAATGGAGCATT
 TGGCAAGTGGTCCGGCGGAAAGCATCACGATAGCCGCATATCGGGTGGTTATGAAAATGTCCCGACTGAC
 GATATTATATGAAGCAGATCGGGCTGGAGAATGTTTGGCTTCATTTATCCGAGAGTTCATTGCTCCAG
 TCACACTGAAGGCTTTCGAGGCTATTATACAAAGGGAATTTGCACTGCTGAATTTGTAGTAAAGTACTC
 ACCTGAAAGACAGCGCTCGCTCCGTCACCACGATGCCTCAACCTTTACCATCAACATTGCTCTGAAT
 AATGTAGGAGAGGATTTTCAGGGAGGTGGATGCAAATTTCTGAGGTATAATTGCTCCATTGAGTCCCCAC
 GAAAAGGCTGGAGCTTCATGCATCTGGGAGGCTCACACATTTGCACGAAGGACTTCTGTAAAAATGG
 AACACGATACATTGCAGTGCATTTATAGATCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR221703 representing NM_001142916
 Red=Cloning site Green=Tags(s)

MGDRGARPGRLMPMLALLSWAAGLGVAEETPGRIPADKLLVITVATKENDGFHRFMNSAKYFNVTYKVLG
 QGQEWGGDMNSIGGGQKVRLLKEAMEHYASQEDLVILFTECFDVFVAGGPEEVLKKFKQTNHKKIVFAA
 DGLLWPKRLADKYPVVHIGKRYLNSGGF IGYAPYISRLVQQWNLQDNDLQFLFYTKVYIDPLKREAFNI
 TLDHKCKIFQALNGATDEVVLKFENGKSRVKNTFYETLPVAINGNGPTKILLNYFGNYVPSWTQENGCA
 LCDVDTIDLSTVDVPPKVTLGVFIEQPTPFLPRFLNLLLTLDPKEALQLFIHNKEVYHEKDIKVFVDKA
 KHDISSIKIVGPEENLSQAEARNMGDMFCRQDEKCDYFVSDADVVL TNPRTLKFLIEQNRKIIAPLVTR
 HGKLSNFWGALSPDGYARSEDYVDIVQGNRVIWNPYMANVYLIQGKTLRSEMNERNYFVRDKLDPD
 MALCRNARDMTLQREKDSPTPETFQMLSPKGVFMYISNRHEFGRLISTANYNTSHLNNDFWQIFENPVD
 WKEYINRDYSKIFTENIVEQPCPDVFWFPIFSERACDELVEEMEYHGKWSGGKHHDSRISGGYENVPTD
 DIHMKQIGLENVLHFIREFIAPVTLKVFAGYYTKGFALLNFVVKYSPERQSLRPHHDASTFTINIALN
 NVGEDFQGGGCKFLRYNCSIESPRKGWSFMHPGRLTHLHEGLPVKNGTRYIAVSFIDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

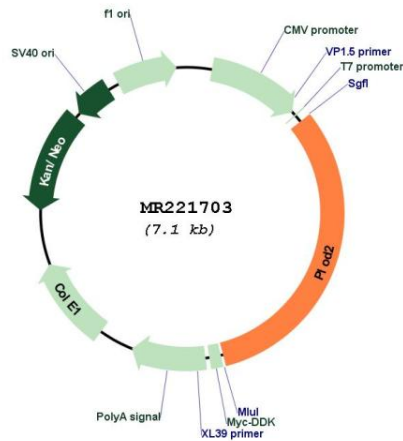
UniProt ID: [Q9R0B9](#)

Cytogenetics: 9 48.4 cM

MW: 87.4 kDa

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 MR221703