

Product datasheet for **MG224833**

P3h3 (NM_013534) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P3h3 (NM_013534) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	P3h3
Synonyms:	BC016431; Grcb; Leprel2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG224833 representing NM_013534
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTCCGGCTCCTCGGTTGTTGCTTTTGTCTGCTGCTGCCCTCCCCGGGGTCCCCGAGCCTCCGAGC
 CCCCGGGCTGGCTCAGTTGTCACCGGGTTCGCCTCCCCAGGCCCCGACTTGCTCTACGCGGACGGCT
 GCGAGCCTACTCGGCCGGGGCTTGGGCGCCCGCAGTGGCGCTGCTGCGAGAGGCGCTGCGGAGCCGGCG
 GCGCTGGGCCGCGCGCCAGGAGTGGGGGCGAGCTGCGCGCCGAGCCGGGGCGCCGCGCTCCCCTCCC
 AGCTCCTCGGAGCCCCACATCCTGTCTCCGGGCCGGGGTCTGGGAACCGCTGCTCCTGCGGCCACGCT
 CCGCCGCGCCGAGTGCCTGACCCAGTGC GCGGTGCGGAGGCTGGGCCGGGGGCGCGCCGCGGCTCCGC
 GTGGGAGCGCGTGC GGATGCCTTCCGCCGGCGGGAGCCTTACAACCTACCTGCAGAGGGCCTACTACC
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 GATGCGGGAAGACATGGCTAAGTACAGAAGGATGTCTGCAATCCGACCCAGAGCTTCCGGGACCTGGTG
 ACGCCCTATACTGGGCAGCTTATGACACTGGCCTGGAGCTTCTGGAGCAACGGGAGGCAGCACTGGCTC
 TACCCCAACTAGAGGAGGCCCTGCAGGGGAGCCTGGCCACATGGAGAGCTGCCGTGCTGCCTGTGAGGG
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 GCTCTGAACCAGTACAAACTCAGTTGGGAGAGCAAGACCTGACCTGGGACCAGAGAGGACATCCAGC
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 CTGCTCAGCTGGCCGGGAGGACTGTGGCAGGCCAGGCGCTAAGCTGCTTCTGGAGGTAAGTGAGCG
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 TGCCGAAGTGCCATAGAAGGTGAACAAGAGCAGCGTATGGACCTGAGTCACCCGTTTCATGCAGACAACT
 GTGCTCCTGACCCGACACTGGCGAATGCTGGCGGGAGCCCCAGCCTACACCTATCGAGACTATAGTGG
 ACTCCTTACCTCAATGATGACTTCAAGGGAGGCGACCTGTTCTTACGACAGCCCAACGCCCTCACTGTC
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 TATGGGCTGTGACTCGGGGACGGCGCTGTGCCCTAGCACTGTGGCACACGTGGGCACCTGAGCACAGTGA
 ACAGGAGTGGACAGAAGCCAAAGAGCTGCTGCAGGAGGAAGAGGAGGAAGAAGAGGAGGAAGACATTCTC
 AGCAGAGACCCCTCCCCAGAACCCCAAGTCACAAGCTTACGCGAGTCCAGGAGAAAGCTGGGAAGCCCC
 GCCGGTCCGGGTCGAGAGGAACTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224833 representing NM_013534
Red=Cloning site Green=Tags(s)

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MLRLLRLLLLLLLLPPPGSPEPEPPGLAQLSPGSPPQAPDLLYADGLRAYSAGAWAPAVALLREALRSRA
ALGRARQECGASCAAEPGAALPSQLLGAPHPVSGPGVWEPLLLRATLRRAECLTQCAVRRLLGPGGAARLR
VGSALRDAFRRRREPYNLQRAYYQLKKLDLAASAAHTFFVANPHTLQMREDMAKYRRMSAIRPQSFRLV
TPLYWAAAYDTGLELLEQREAAALALPQLEALQGS LAHME SCRAACEGPEEHQGAEEEEEGESQGGLYEAI
GHWIRVLCQRQHCVADTATRPGRSFPVQDFLLSQLRRLHEAYAQVGNMSQAMENVLSVLLFYPEDEAAKK
ALNQYQTQLGEPRLDGPREDIQRFILRSLGKRLYYAMEHLGTSFKDPDPSWTPEALIPKALRERLRED
QEKKPWDHQPPQKPLAHWKDALLMEGVTLTQDAQQLNGSERAVLDGLL TSAECGVLLQLAKDAAQAGAR
SGYRGRSPHSPHERFEGLTVLAAAQLARAGTVGRPGAKLLLEVSERVRTLQAYFSPERPLHLSFTHLV
CRSAIEGEQEQRMDLSHPVHADNCVLDPDTGECWREPPAYTYRDYSGLLYLNDDFKGGDLFFTPNALTV
TAQVRPRCGRVAFSSGGENPHGVAVTRGRRCALALWHTWAPEHSEQEWEAKELLQEEEEEEEEEDIL
SRDPSPEPPSHKLRVQEKAGKPRRVRVREEL
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013534

ORF Size: 2196 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_013534.5](#)

RefSeq Size: 2779 bp

RefSeq ORF: 2199 bp

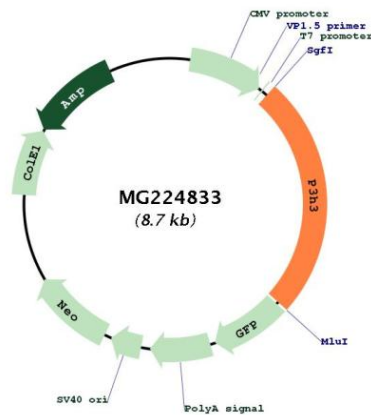
Locus ID: 14789

UniProt ID: [Q8CG70](#)

Cytogenetics: 6 59.17 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). Required for normal hydroxylation of lysine residues in type I collagen chains in skin, bone, tendon, aorta and cornea (PubMed:28115524). Required for normal skin stability via its role in hydroxylation of lysine residues in collagen alpha chains and in collagen fibril assembly (PubMed:27119146, PubMed:28115524). Apparently not required for normal prolyl 3-hydroxylation on collagen chains, possibly because it functions redundantly with other prolyl 3-hydroxylases (PubMed:28115524).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG224833