

Product datasheet for **RG224487**

P4HA3 (NM_182904) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P4HA3 (NM_182904) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	P4HA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG224487 representing NM_182904
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCTCTGGGCGCGGCTGGCGCGCTGCTGGCGGTGCTGGCGCTCGGGACAGGAGACCCAGAAAGGG
 CTGCGGCTCGGGGCGACAGTTCTCGGCCTGACCAGCGTGGCGCGCCCTGGCGCCGAGCGCCGGCT
 GCTGGGGCTGCTGAGGCGGTACCTGCGCGGGGAGGAGGCGCGGCTGCGGGACCTGACTAGATTCTACGAC
 AAGGTACTTTCTTTCATGAGGATTCAACAACCCCTGTGGCTAACCCCTGCTTGCATTTACTCTCATCA
 AACGCCTGCAGTCTGACTGGAGGAATGTGGTACATAGTCTGGAGGCCAGTGAGAACATCCGAGCTGAA
 GGATGGCTATGAGAAGGTGGAGCAAGACCTTCCAGCCTTTGAGGACCTTGAGGGAGCAGCAAGGGCCCTG
 ATGCGGCTGCAGGACGTGTACATGCTCAATGTGAAAGGCCTGGCCCGAGGTGCTTTTCAGAGAGTCACTG
 GCTCTGCCATCACTGACCTGTACAGCCCCAACCGCTCTTTCTCTCACAGGGGATGACTGCTTCCAAGT
 TGGCAAGTGGCCTATGACATGGGGATTATTACCATGCCATTCCATGGCTGGAGGAGGCTGTCAGTCTC
 TCCGAGGATCTTACGGAGAGTGAAGACAGAGGATGAGGCAAGTCTAGAAGATGCCTTGGATCACTTGG
 CCTTGTCTATTTCCGGGAGGAAATGTTTCGTGTGCCCTCAGCCTCTCTCGGGAGTTTCTTCTCTACAG
 CCCAGATAATAAGAGGATGGCCAGGAATGTCTTGAATATGAAAGGCTCTTGGCAGAGAGCCCCAACCCAC
 GTGGTAGCTGAGGCTGTCCATCCAGAGGCCAATATACCCACCTGCAGACCAGAGACACCTACGAGGGGC
 TATGTCAGACCCTGGGTTCCAGCCACTCTCTACCAGATCCCTAGCCTCTACTGTTCTCTATGAGACCA
 TTCCAACGCCTACCTGCTGCTCCAGCCATCCGGAAGGAGGTATCCACCTGGAGCCCTACATTGCTCTC
 TACCATGACTTCGTCAGTGACTCAGAGGCTCAGAAAATTAGAGAACTGCAGAACCATGGCTACAGAGGT
 CAGTGGTGGCATCAGGGGAGAAGCAGTTACAAGTGGAGTACCGCATCAGCAAAAAGTGCCTGGCTGAAGGA
 CACTGTTGACCCAAAACCTGGTGACCCTCAACCACCGCATTGCTGCCCTCACAGGCCTTGATGTCCGGCCT
 CCTATGCAGAGTATCTGCAGGTGGTGAATATGGCATCGGAGGACACTATGAGCCTCACTTTGACCATG
 CTACGTACCAAGCAGCCCCCTCTACAGAATGAAGTCAAGAAACCGAGTTGCAACATTTATGATCTATCT
 GAGCTCGGTGGAAGCTGGAGGAGCCACAGCCTTCTATGCCAACCTCAGCGTGCCTGTGGTTAGGAAT
 GCAGCACTGTTTTGGTGGAACTGCACAGGAGTGGTGAAGGGACAGTGACACACTTCATGCTGGCTGTC
 CTGCTCCTGGTGGGAGATAAGTGGTGGCCAACAAGTGGATACATGAGTATGGACAGGAATCCCGAGACC
 CTGCAGCTCCAGCCCTGAAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224487 representing NM_182904
 Red=Cloning site Green=Tags(s)

MGPGARLAALLAVLALGTGDPERAAARGDTFSALTSVARALAPERLLGLLRRYLRGEEARLRDLTRFYD
 KVL SLHEDSTTPVANPLLAFTLIKRLQSDWRNVVHSLEASINIRALKDGYEKVEQDLPAFEDLEGAARAL
 MRLQDVYMLNVKGLARGVFQRVTGSAITDLYSPKRLFSLTGDDCFQVGKVAYDMGDYYHAIPWLEEAVSL
 FRGSYGEWKTEDEASLEDALDHLAFAYFRAGNVSCALSLSREFLLYSPDNKRMARNVLYKIERLLAESPNH
 VVAEAVIQRPNIPLQTRDYEGLCQTLGSPQTLYQIPSLYCSYETNSNAYLLLQPIRKEVIHLEPYIAL
 YHDFVSDSEAQKIRELAEPWLQRSVVASGEKQLQVEYRISKSAWLKDTVDPKLVTLNHRIAALTGLDVRP
 PYAEYLQVVNYGIGGHYEPHFDHATSPSSPLYRMKSGNRVATFMIYLSSEAGGATAFIYANLSPVVRN
 AALFWNNLHRSGEGSDTLHAGCPVLVGDKWVANKWIHEYGQEFRRPCSSPED

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_182904

ORF Size: 1632 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_182904.5](#)

RefSeq Size: 2272 bp

RefSeq ORF: 1635 bp

Locus ID: 283208

UniProt ID: [Q7Z4N8](#)

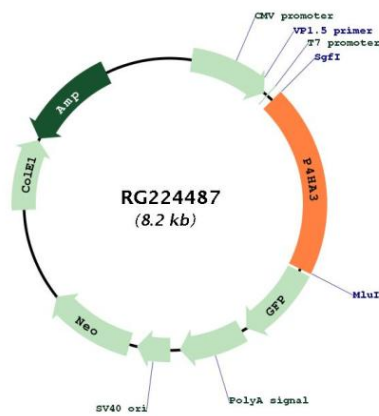
Cytogenetics: 11q13.4

Protein Families: Druggable Genome

Protein Pathways: Arginine and proline metabolism, Metabolic pathways

Gene Summary: This gene encodes a component of prolyl 4-hydroxylase, a key enzyme in collagen synthesis composed of two identical alpha subunits and two beta subunits. The encoded protein is one of several different types of alpha subunits and provides the major part of the catalytic site of the active enzyme. In collagen and related proteins, prolyl 4-hydroxylase catalyzes the formation of 4-hydroxyproline that is essential to the proper three-dimensional folding of newly synthesized procollagen chains. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RG224487