

## Product datasheet for **RC224487**

### **P4HA3 (NM\_182904) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	P4HA3 (NM_182904) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P4HA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC224487 representing NM\_182904  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGTCCTGGGCGCGGCTGGCGCGCTGCTGGCGGTGCTGGCGCTCGGGACAGGAGACCCAGAAAGGG  
 CTGCGGCTCGGGCGACACGTTCTCGGCCTGACCAGCGTGGCGCGCCCTGGCCCGAGCGCCGGCT  
 GCTGGGGCTGCTGAGGCGGTACCTGCGCGGGGAGGAGGCGCGGCTGCGGGACCTGACTAGATTCTACGAC  
 AAGGTACTTTCTTTCATGAGGATTCAACAACCCCTGTGGCTAACCCCTGCTTGCATTTACTCTCATCA  
 AACGCCTGCAGTCTGACTGGAGGAATGTGGTACATAGTCTGGAGGCCAGTGAGAACATCCGAGCTGAA  
 GGATGGCTATGAGAAGGTGGAGCAAGACCTTCCAGCCTTTGAGGACCTTGAGGGAGCAGCAAGGGCCCTG  
 ATGCGGCTGCAGGACGTGTACATGCTCAATGTGAAAGGCCTGGCCCGAGGTGCTTTTCAGAGAGTCACTG  
 GCTCTGCCATCACTGACCTGTACAGCCCCAACCGCTCTTTTCTCTCACAGGGGATGACTGCTTCCAAGT  
 TGGCAAGGTGGCCTATGACATGGGGATTATTACCATGCCATTCCATGGCTGGAGGAGGCTGCAGTCTC  
 TCCGAGGATCTTACGGAGAGTGAAGACAGAGGATGAGGCAAGTCTAGAAGATGCCTTGGATCACTTGG  
 CCTTGTCTATTTCCGGGCAGGAAATGTTTCGTGTGCCCTCAGCCTCTCTCGGGAGTTTCTTCTCTACAG  
 CCCAGATAATAAGAGGATGGCCAGGAATGTCTTGAATATGAAAGGCTCTTGGCAGAGAGCCCCAACCCAC  
 GTGGTAGCTGAGGCTGTCCATCCAGAGGCCAATATACCCACCTGCAGACCAGAGACACCTACGAGGGGC  
 TATGTCAGACCCTGGGTTCCAGCCCACTCTCTACCAGATCCCTAGCCTCTACTGTTCTCTATGAGACCA  
 TTCCAACGCCTACCTGCTGCTCCAGCCCATCCGGAAGGAGGTATCCACCTGGAGCCCTACATTGCTCTC  
 TACCATGACTTCGTCAGTGACTCAGAGGCTCAGAAAATTAGAGAACTGCAGAACCATGGCTACAGAGGT  
 CAGTGGTGGCATCAGGGGAGAAGCAGTTACAAGTGGAGTACCGCATCAGCAAAAAGTGCCTGGCTGAAGGA  
 CACTGTTGACCCAAAACCTGGTGACCCTCAACCACCGCATTGCTGCCCTCACAGGCCTTGATGTCCGGCCT  
 CCTATGCAGAGTATCTGCAGGTGGTGAATATGGCATCGGAGGACACTATGAGCCTCACTTTGACCATG  
 CTACGTACCAAGCAGCCCCCTCTACAGAATGAAGTCAAGAAACCGAGTTGCAACATTTATGATCTATCT  
 GAGCTCGGTGGAAGCTGGAGGAGCCACAGCCTTCACTATGCCAACCTCAGCGTGCCTGTGGTTAGGAAT  
 GCAGCACTGTTTTGGTGGAACTGCACAGGAGTGGTGAAGGGGACAGTGACACACTTCATGCTGGCTGTC  
 CTGTCCTGGTGGGAGATAAGTGGTGGCCAACAAGTGGATACATGAGTATGGACAGGAATCCCGAGACC  
 CTGCAGCTCCAGCCCTGAAGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC224487 representing NM\_182904  
 Red=Cloning site Green=Tags(s)

MGPGARLAALLAVLALGTGDPERAAARGDTFSALTSVARALAPERLLGLLRRYLRGEEARLRDLTRFYD  
 KVL SLHEDSTTPVANPLLAFTLIKRLQSDWRNVVHSLEASINIRALKDGYEKVEQDLPAFEDLEGAARAL  
 MRLQDVYMLNVKGLARGVFQRTVTSIAITDLYSPKRLFSLTGDDCFVQVKVAYDMGDYHAIPLWEEAVSL  
 FRGSYGEWKTEDEASLEDALDHLAFAYFRAGNVSCALSLSREFLLYSPDNKRMRNVLYKIERLLAESPNH  
 VVAEAVIQRPNIPLQTRDYEGLCQTLGSPQTLYQIPSLYCSYETNSNAYLLLQPIRKEVIHLEPYIAL  
 YHDFVSDSEAQKIRELAEPWLQRSVVASGEKQLQVEYRISKSAWLKDTVDPKLVTLNHRIAAL TGLDVRP  
 PYAEYLQVVNYGIGGHYEPHFDHATSPSSPL YRMKSGNRVATFMIYLSSEAGGATAFIYANL SVPVVRN  
 AALFWWNLHRSGEGSDTLHAGCPVLVGDKWVANKWIHEYQEFRRPCSSSPED

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6123\\_b11.zip](https://cdn.origene.com/chromatograms/mk6123_b11.zip)

**Restriction Sites:**

SgfI-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

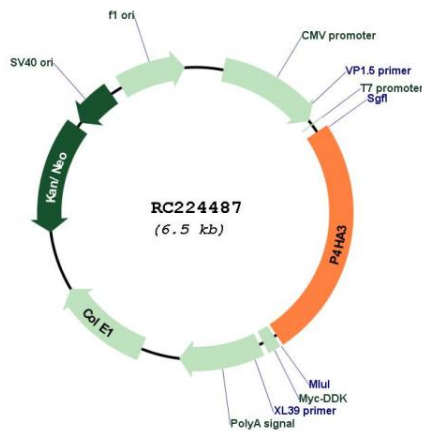
**Protein Families:** Druggable Genome

**Protein Pathways:** Arginine and proline metabolism, Metabolic pathways

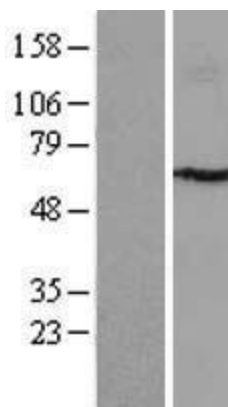
**MW:** 59.3 kDa

**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 RC224487



Western blot validation of overexpression lysate (Cat# [LY403649]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224487 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).