

## Product datasheet for **RC216367**

### **PHD4 (P4HTM) (NM\_177939) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PHD4 (P4HTM) (NM_177939) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHD4
Synonyms:	EGLN4; HIDEA; HIFPH4; P4H-TM; PH-4; PH4; PHD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC216367 representing NM\_177939  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGCAGCGCGGTGACAGGCCAGCGCCTGAGACCGCGCGGCCGAGGAGCCTCGAGGCCGAGT  
 GGGCGCCGCCAGACCACTGCCAGGCTCAGGCGGGCGGCCGGCTGGGCGACGGCGAGGACGCACCGGTGCG  
 TCCGCTGTGCAAGCCCCGCGCATCTGCTCGCGCGCTACTTCCTGGTGTGATGGTGTTCTGTCACCTG  
 TACCTGGGTAACGTGCTGGCGCTGCTGCTCTTCGTGCACTACAGCAACGGCGACGAAAGCAGCGATCCCG  
 GGCCCAACACCGTGCCAGGGCCCCGGGCCGAGCCACCTTAGGTCCCCTCACCCGGCTGGAGGGCAT  
 CAAGGTGGGACAGCGTAAGGTCCAGCTGGTACCAGAGGGATCACTTCATCCGAACCTCAGCCTC  
 AAGCCGCTGCTCTCGAAATCCCCGGCTTCTGACTGATGAAGAGTGTGGCTCATCATCCATCTGGCGC  
 AGATGAAGGGGTTACAGCGCAGCCAGATCTGCCTACTGAAGAGTATGAAGAGGCAATGAGCACTATGCA  
 GGTGAGCCAGCTGGACCTTCCGGCTGCTGGACCAGAACCGTATGGGCACCTTCAGCTCCGTGAGGTT  
 CTGGCCAGACTCGCCTGGGAAATGGATGGTGGATGACTCCAGAGAGCATTACAGGAGATGTACGCCGCA  
 TCAAGGCTGACCTGATGGTGACGGAGTCTGAGTCTGCAGGAGTTCTCCAACATGGACCTTCGGGACTT  
 CCACAAGTACATGAGGAGCCACAAGGCAGAGTCCAGTCCAGTGGTGGCGAACAGCCACCATACCTGGCTC  
 TACCAGGGTGAGGGTGCCACCACATCATGCGTGCCATCCGCCAGAGGGTGTGCGCCTCACTCGCCTGT  
 CGCCTGAGATCGTGGAGCTCAGCGAGCCGCTGCAGGTTGTTTCGATATGGTGGGGGGCCACTACCATGC  
 CCACGTGGACAGTGGGCTGTGTACCCAGAGACCATCTGCTCCCATACCAAGCTGGTAGCCAACGAGTCT  
 GTACCTTCGAGACCTCCTGCCGCTACATGACAGTGTGTTTTATTTGAACAACGTCAGTGGTGGGGCG  
 AGACTGTTTTCCCTGTAGCAGATAACAGAACTACGATGAAATGAGTCTGATTGAGGATGACGTGGACCT  
 CCGTGACACACGGAGGCACTGTGACAAGGAAACCTGCGTGTCAAGCCCCAACAGGGCACAGCAGTCTTC  
 TGGTACAACACTGCTGCTGATGGCAAGGTTGGGTGGGTGACGTAGACGACTACTCGCTGCACGGGGCT  
 GCCTGGTACGCGCGGCCACCAAGTGGATTGCCAACAACTGGATTAATGTGGACCCAGCCGAGCGCGGCA  
 AGCGCTGTTCCAACAGGAGATGGCCCGCTTGCCTGAGAGGGGGCACCGACTCACAGCCCGAGTGGGCT  
 CTGGACCGGGCTACCGCATGCGCGCTGGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC216367 representing NM\_177939  
 Red=Cloning site Green=Tags(s)

MAAAAVTGQRPETAAAEASRPQWAPPDHCQAQAAAGLDGEDAPVVRPLCKPRGICSRAYFLVLMVFVHL  
 YLGNVALLLVFVHYSNGDESSDPGPQHRAQGPPEPTLGPLTRLEGIKVGHERKVQLVTRDRDFIRTL  
 KPLLFEIPGFLTDEECRLIIHLAQMKGLQRSQILPTEEYEEAMSTMQVSLDLFRLLDQNRDGHLLREV  
 LAQTRLGNGWMTPEIQEMYAAIKADPDGDGVLSLQEFNMDLRDFHKYMRSHKAESSELVRNSHHTWL  
 YQEGEAHHIMRAIRQVRLRLTRLSPEIVELSEPLQVVRYGEGGHYHAHVDSGPVYPETICSHTKLVANES  
 VPFETSCRYMTVLFYLNVTGGGETVFPVADNRTYDEMSLIQDDVDLRDRRHCDCGNLRVKKPQQGTAVF  
 WYNYLPDQGWVGDVDDYSLHGGCLVTRGKWIANNWINVDPSSRARQALFQQEMARLAREGGTDSQPEWA  
 LDRAYRDARVEL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6200\\_g07.zip](https://cdn.origene.com/chromatograms/mk6200_g07.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_177939

**ORF Size:** 1506 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\\_177939.3](#)

**RefSeq Size:** 2111 bp

**RefSeq ORF:** 1509 bp

**Locus ID:** 54681

**UniProt ID:** [Q9NXG6](#)

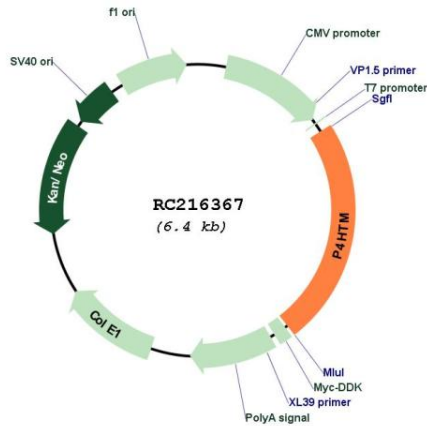
**Cytogenetics:** 3p21.3

**Protein Families:** Druggable Genome, Transmembrane

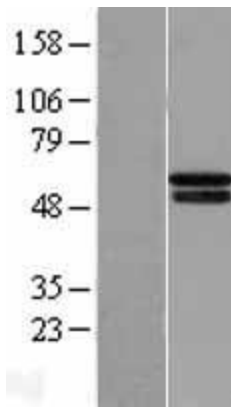
**MW:** 56.5 kDa

**Gene Summary:** The product of this gene belongs to the family of prolyl 4-hydroxylases. This protein is a prolyl hydroxylase that may be involved in the degradation of hypoxia-inducible transcription factors under normoxia. It plays a role in adaptation to hypoxia and may be related to cellular oxygen sensing. Alternatively spliced variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC216367



Western blot validation of overexpression lysate (Cat# [LY403592]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216367 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).