

Product datasheet for **RC222530**

PHC1 (NM_004426) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHC1 (NM_004426) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHC1
Synonyms:	EDR1; HPH1; MCPH11; RAE28
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222530 representing NM_004426 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGACTGAGAGCGAGCAGAAGCTCCAATTCACCAATGGGAGTTCTAGCTCAGGGGGCAGCTCTCGGC
CCCAGATAGCTCAAATGTCATAATGAACGACAAGCAGTGCAGGCTCTGCAAGCACTGCAGCGGCAGCC
CAATGCAGCTCAGTATTTCCACCAGTTCATGCTCCAGCAGCAGCTCAGTAATGCCAGCTGCATAGCCTG
GCTGCCGTCAGCAGGCCACAATTGCTGCCAGTCGGCAGGCCAGCTCCCCAAACACCAGCACTACACAGC
AGCAGACTACCACCACCAGGCCTCGATCAATCTGGCCACCACATCGGCCGCCAGCTCATCAGCCGATC
CCAGAGTGTGAGCTCTCCAGTGTACACCTTGACCCAATCTGTGCTACTGGGGAACACCACCTCCCCA
CCCTCAACCAGTCTCAGGCCAGATGTATCTACGGCCACAGCTGGGAAACCTATTGCAGGTAAACCGAA
CCCTGGGTGCGAATGTGCCTCTAGCCTCCCAACTCATCCTGATGCCTAATGGGGCGGTGGCTGCAGTCCA
GCAGGAGGTGCCATCTGCTCAGTCTCCTGGAGTTCATGCAGATGCAGATCAGGTTGAGAAGTTGGCAGTA
AGGAATCAACAGGCCTCAGCTCAAGGACCTCAGATGCAAGGCTCCACTCAGAAGGCCATTCTCCAGGAG
CCTCCCCTGTCTTAGCCTCTCCAGGCCTTAGCCAGGCCCTAGCGGTGGCACAGGCTTCTCTGGGGC
CACAAACCAGTCCCTCAACCTTAGTCAAGCTGGTGGAGGAGTGGGAATAGCATCCAGGGTCCATGGGT
CCAGGTGGAGGTGGCAGGCACATGGTGGTTGGGTGAGTTCCTCAGGAATGGGTGGTGGGAGCT
GTCCCAGGAAGGGTACAGGAGTGGTGCAGCCCTTGCTGCAGCCAAACAGTGACTGTGAGCCAGGGCAG
CCAGACAGAGGCAGAAAGTGCAGCAGCCAAGAAGGCAGAAAGCAGATGGGAGTGGCCAGCAGAATGTGGGC
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TCCAGCCCCATTCACTGATTCAGCAACAGCAACAGATCCACCTCCAGCAGAAACAGGTGGTGGTCCAGCA
GCAGATTGCCATCCACCACCAGCAGCAGTTCAGCACCAGGAGTCCAGCTCCTTACACAGCTACACAC
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CCCTCACTGCCCTCAGCCACCACAGTCCACCTACTCAGCAGGTCCCACCTTCCAGTCCAGCAGCA
AGCCAAACCCTGGTCGTTAGCCCATGCTTCAGTCTTACCCTTGTCTTCCACTGATGCAGCCCT



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AAGCCACCAATCCCATCCAATCCAAACCACCTGTAGCACCTATCAAGCCGCCTCAGTTAGGGGCCGCTA
 AGATGTCAGTGGCCAGCAACCACCACCCCATATCCCTGTGCAAGTTGTAGGCACTCGACAGCCAGGTAC
 AGCCCAGGCACAGGCTTTGGGGTTGGCAGAGCTGGCAGCTGCTGTACCTACTTCCCGGGGGATGCCAGGT
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 CATTGGGTTCAATGCTTCTGCCAAGGCATCTCCAGTAGCAGAAAGCCAAAAGTCATGGACGAGAAGAG
 CAGTCTTGAGAAAAAGCTGAATCAGTGCTAATGTGAATGCTAATACTCCAAGCAGTGAAGTGTAGCC
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 GATTGCAGAGGAATTCGCTCACAGGAGATTGATGGACAGGCCCTTTTATTACTTAAAGAAGAACATCTT
 ATGAGTGCCATGAACATCAAGCTGGGCCCTGCCCTCAAGATCTGCGCCAAGATAAATGTCTCAAGGAGA
 CC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222530 representing NM_004426
 Red=Cloning site Green=Tags(s)

METESEQNSNSTNGSSSSGGSSRPQIAQMSLYERQAVQALQALQRQPNAAYFHQFMLQQQLSNAQLHSL
 AAVQQATI AASRQASSPNTSTTQQQTTTQASINLATTSAACL I SRSQSVSSPSATTLTQSVLLGNTTSP
 PLNQSAQMYLRPQLGNLLQVNRTLGRNVPLASQLILMPNGAVAAVQVEVPSAQSPGVHADADQVQNLAV
 RNQQASAQGPQMGGSTQKAI PPGASPVSSL SQASSQALAVAQASSGATNQSLNLSQAGGSGNSIPGSMG
 PGGGGQAHGGLGQLPSSGMGGGSCPRKGTGVVQPLPAAQT VTVS QGSQTEAESAAAKKAEADGSGQQNVG
 MNL TRTATPAPSQTLISSATYTIQPHSLIQQQQIHLQQKQVVIQQQIAIHHQQQFQHRQSOLLHTATH
 LQLAQQQQQQQQQQQQPQATTLTAPQPPQVPPPTQQVPPSQQQAQTLVVQPMLQSSPLSLPPDAAP
 KPPPIPIQSKPPVAPIKPPQLGAAKMSAAQPPPHIPVQVVGT RQP GTAQAQALGLAQLAAAVPTSRGMGP
 TVQSGQAH LASSPPSSQAPGALQECPPTLAPGMTLAPVQGT AHVVKGGATTSSPVVAQVPAAFYMQSVHL
 PGKPQTLAVKRAKADSEERDDVSTLGSMLPAKASPVAESPKVMDEKSSLGEKAESVANVNANTPSSSELVA
 LTPAPSVPPTLAMVSRQMGSKPPQAIKVPQILTHIEGFVIQEGAEPFPVGCSSQLLKESEKPLQGLP
 TGLTENQSGGPLGVDSPSAELDKKANLLKCEYCGKYAPAEQFRGSKRFSMTCAKRYNVSCSHQFRLKPK
 KMKEFQEANYARVRRRGP RRSSDIARAKIQGKCHRGQEDSSRGSNDSSYDEAL SPTSPGPLSVRAGHGE
 RDLGNPNTAPPTPELHG INPVFLSSNPSRWSVEEVYEF IASLQGCQEIAEEFRSQEIDGQALLLKEEHL
 MSAMNIKLGPAKIKAKINVLKET

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6166_c09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_004426

ORF Size: 3012 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_004426.2](#), [NP_004417.2](#)

RefSeq Size: 5206 bp

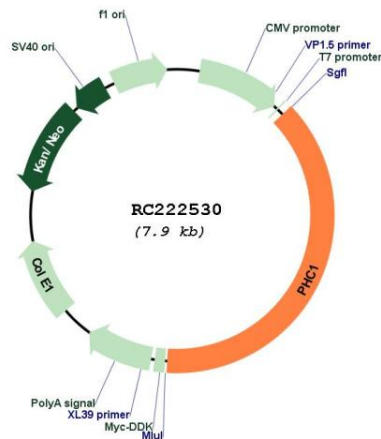
RefSeq ORF: 3015 bp

Locus ID: 1911

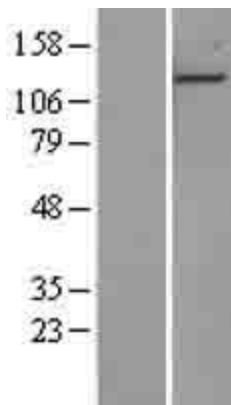
UniProt ID: [P78364](#)
 Cytogenetics: 12p13.31
 Domains: SAM
 Protein Families: ES Cell Differentiation/IPS, Stem cell - Pluripotency
 MW: 105.4 kDa

Gene Summary: This gene is a homolog of the Drosophila polyhomeotic gene, which is a member of the Polycomb group of genes. The gene product is a component of a multimeric protein complex that contains EDR2 and the vertebrate Polycomb protein BMH1. The gene product, the EDR2 protein, and the Drosophila polyhomeotic protein share 2 highly conserved domains, named homology domains I and II. These domains are involved in protein-protein interactions and may mediate heterodimerization of the protein encoded by this gene and the EDR2 protein. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC222530



Western blot validation of overexpression lysate (Cat# [LY401411]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222530 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).