

Product datasheet for RC212697

PHC2 (NM_004427) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHC2 (NM_004427) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHC2
Synonyms:	EDR2; HPH2; PH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212697 representing NM_004427 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCTCAGGGAACGGAACTCTGCCTCCAGCATCGCCGGCACTGCCCCAGAAATGGTGAGAATAAAC
CACCACAGGCCATTGTGAAACCCAAATCCTGACGCATGTTATCGAAGGGTTTGTGATCCAGGAGGGGC
GGAGCCTTCCCGGTGGGACGCTCGTCCCTGCTGGTGGGAATCTCAAGAAGAAGTATGCACAGGGGTC
CTGCCTGAGAACTTCCACAGCAGGATCACACCACCACCTGACTCGGAGATGGAGGAGCCCTATCTGC
AAGAATCAAAGAGGAGGGTGTCCCCTCAAATCAAGTGTGAGCTCTGTGGCCGGTGGACTTTGCCTA
TAAGTTCAAGCGTTCCAAGCGCTTCTGTTCCATGGCTTGTGCAAAGAGGTACAACGTGGGATGCACAAA
CGGGTGGGACTTTTCCACTCAGACCCGGAGCAAGCTGCAGAAGGCAGGAGCTGCGACCCACAACCGCGTC
GGGCCAGCAAAGCCAGTCTGCCACCCTTACCAAGGATACCAAGAAGCAGCCAACAGGCACTGTGCCCT
TTCGGTACTGCTGCTTTCAGCTAACACACAGCCAGGAAGACTCCAGCCGTTGCTCAGATAACTCAAGC
TATGAGGAACCTTGTCACCATCTCAGCCAGCTCATCTACTCCCGCCGGCACAAGGCCAGCGGGACC
TGGAGTCCCCGACATGCATATGCGGGACCTGGTGGGCATGGGACCACTTCTGCCAAGTGAGCCAC
CAAGTGAATGTAGAAGACGTCTACGAATTCATCCGCTCTCTGCCAGGCTGCCAGGAGATAGCAGAGGAA
TTCCGTGCCAGGAAATCGACGGCAAGCCCTGCTGCTCAAGGAGGACCACCTGATGAGCGCCATGA
ACATCAAGCTGGGCCCCGCTGAAGATCTATGCCGCATCAGCATGCTCAAGGACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212697 representing NM_004427
 Red=Cloning site Green=Tags(s)

MTSGNGNSASSIAGTAPQNGENKPPQAIVKPQILTHVIEGFVIQEGAEPFPVGRSLLVGNLKKKYAQGF
 LPEKLPQQDHTTTTDDSEMEEPYLQESKEEGAPLKLKCELCGRVDFAYKFKRSKRFCSMACAKRYNVGCTK
 RVGLFHSDRSKLQKAGAATHNRRRASKASLPLTKDTKKQPTGTVPLSVTAALQLTHSQEDSSRCSNNS
 YEEPLSPIASSSTSRRRQQRDLELPDMHMRDLVGMGHHFLPSEPTKWNVEDVYEFIRSLPGCQIEIAEE
 FRAQEIDGQALLLLKEDHLSAMNIKLGPAIKIYARISMLKDS

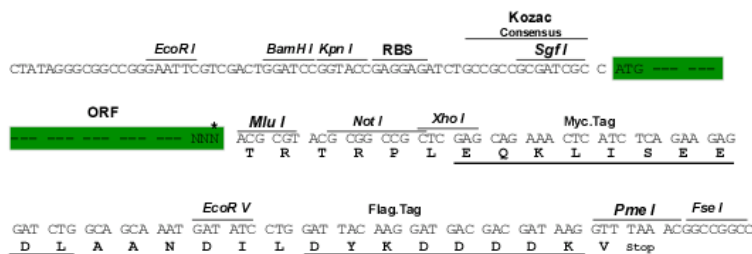
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6468_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004427

ORF Size: 969 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_004427.4](#)

RefSeq Size: 2597 bp

RefSeq ORF: 972 bp

Locus ID: 1912

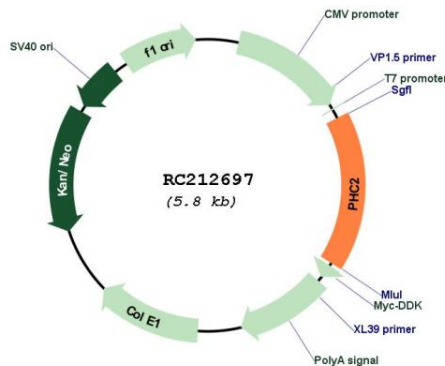
UniProt ID: [Q8IXK0](#)

Cytogenetics: 1p35.1

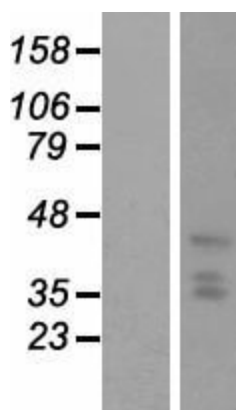
MW: 35.6 kDa

Gene Summary: In *Drosophila melanogaster*, the 'Polycomb' group (PcG) of genes are part of a cellular memory system that is responsible for the stable inheritance of gene activity. PcG proteins form a large multimeric, chromatin-associated protein complex. The protein encoded by this gene has homology to the *Drosophila* PcG protein 'polyhomeotic' (Ph) and is known to heterodimerize with EDR1 and colocalize with BMI1 in interphase nuclei of human cells. The specific function in human cells has not yet been determined. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC212697



Western blot validation of overexpression lysate (Cat# [LY417980]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212697 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).