

Product datasheet for RC230633

PHF8 (NM_001184896) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PHF8 (NM_001184896) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PHF8 |
| Synonyms: | JHDM1F; KDM7B; MRXSSD; ZNF422 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC230633 representing NM_001184896 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACAGGAGCCGCGCTATCGTCCAGAGAGGACGCGTGCTGCCGCTCCCGCCCTCTTGACACGACGA
ACCTGGCCGGCCGAGAACGCTCCAGGGCCGAGCGAAGATGGCCTCGGTGCCGGTGTATTGCCTCTGCCG
GCTGCCTTACGATGTGACCCGCTTCATGATCGAGTGTGACATGTGCCAGGACTGGTTTCATGGCAGTTGT
GTTGGTGTGAAGAGGAGAAGGCTGCTGACATTGACCTCTACCACTGCCCAACTGTGAAGTCTTGACATG
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GACCGGGAGCCCTACGTTTCGTCAGAGAGCTCCGGAGTAGGACTTTTGACAGCTCAGATGAAGTATTCTG
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TGAAGAAGGATGGGTGGGCATGACGCTGCCCTCGCCATCATTACTGTGAGGGATGTTGAACACTATGT
TGGTCTGACAAAGAGATTGATGTGATTGATGTGACCCGCCAGGCTGACTGCAAGATGAAGCTTGGTGAT
TTTGTGAAATACTATTACAGCGGGAAGAGGAGAAAGTCTCAATGTGATTGTTGAAATCTCTGATA
CCAGACTTTCTAACCTTGTGGAGACCCGAAGATTGTTGAAAGCTGTGATGGGTGAAAACCTTGTGGCC
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ACAGGGTGGATCCATGCTGTGCTGACGCTGTGGACTGCCTTGCCTTTGGAGGAACTTCTTACACAGCC
TTAACATCGAGATGCAGCTCAAAGCCTATGAGATTGAGAAGCGGCTGAGCACAGCAGACCTTTCAGATT
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CAAGGAAAGAAGCTCTGCCAGACCATGAGGATGAGATCCCGGAGACAGTGCAGAACCGTACAGCTCATTAA
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TTTGGGCTGCAGAGGATCTTCCCAGCCGGCTCCATTCCCCTAACCAGGCCAGCCATTCCACTTCAGTGT
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 TGTGGCTGCCACACCACAACTTGTACCTCCTCCTCACCCCTGCCTCCTCCTGAGCCTAAACAAGAGGCC
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 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230633 representing NM_001184896
 Red=Cloning site Green=Tags(s)

MNRSRAIVQRGRVLPAPLDTTNLAGRRLQGRAKMASVPVYCLCRLPYDVTRFMIECDMCQDWFHGSC
 VGVVEEKAADIDLYHCPNCEVLHGPSIMKKRRGSSKGGHDTKGGKPVKTSPTFVRELRSRTFDSSDEVIL
 KPTGNQLTVEFLEENSFSVPILVLKKGDLGMLTSPSFTVRDVEHYVGSDEIDVIDVTRQADCKMKLGD
 FVKYYSYSGKREKVLNVISLEFSDTRLNLVETPKIVRKL SWVENLWPEECVFERPNVQKYLMSVRDSYT
 DFHIDFGGTSVWYHVLKGEKIFYLIRPTNANLTLFECWSSSNQNMFFGDQVDKCYKCSVKQGQTLFIP
 TGWIHAVLTPVDCLAFGGNFLHSLNIEMQLKAYEIEKRLSTADLFRFPNFETICWYVGKHILDIRGLRE
 NRRHPASYLVHGGKALNLAFAWTRKEALPDHEDEIPETVRTVQLIKDLAREIRLVEDIFQQNVGKTSNI
 FGLQRIFPAGSIPLTRPAHSTSVMSRSLSPSKNGSKKKGLKPKELFKKAERKKGESSALGPAGQLSYNL
 MDTYSHQALKTGSFQKAKFNITGACLNDSDDSDPDLDLGNEsplallmsngstkrvkslsksrtrkiaK
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 EEDYTTDEDMVEGVEGKLGNGSGAGGILDLLKASRQVGGPDYAALTEAPASPSTQEAIQGMCMANLQSS
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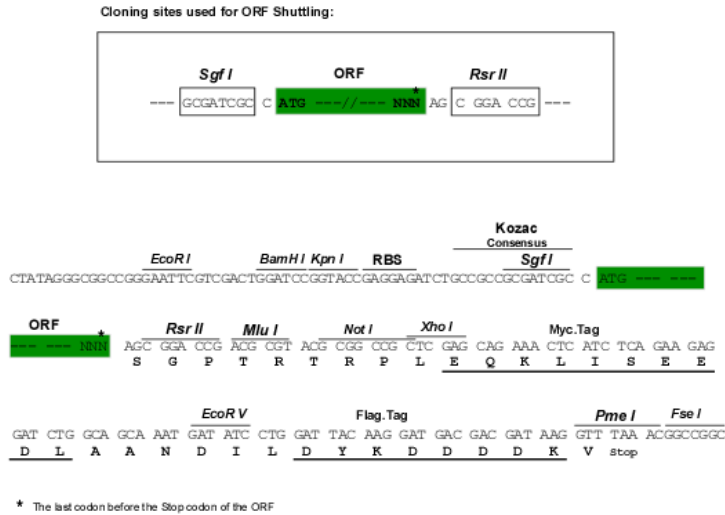
SGPTRRRLKQLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8036_d11.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_001184896

ORF Size: 3180 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001184896.1](#), [NP_001171825.1](#)

RefSeq ORF: 3183 bp

Locus ID: 23133

UniProt ID: [Q9UPP1](#)

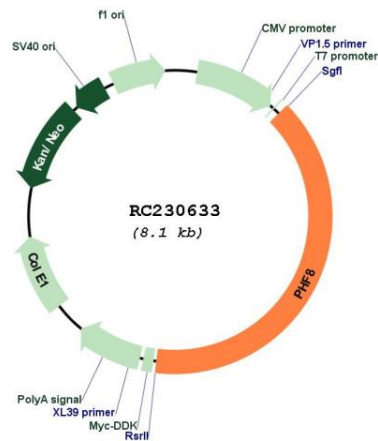
Cytogenetics: Xp11.22

Protein Families: Druggable Genome, Transcription Factors

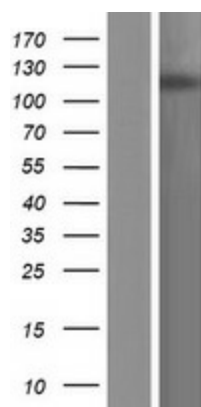
MW: 118.3 kDa

Gene Summary: The protein encoded by this gene is a histone lysine demethylase that preferentially acts on histones in the monomethyl or dimethyl states. The encoded protein requires Fe(2+) ion, 2-oxoglutarate, and oxygen for its catalytic activity. The protein has an N-terminal PHD finger and a central Jumonji C domain. This gene is thought to function as a transcription activator. Defects in this gene are a cause of syndromic X-linked Siderius type intellectual disability (MRXSSD) and over-expression of this gene is associated with several forms of cancer. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2017]

Product images:



Circular map for RC230633



Western blot validation of overexpression lysate (Cat# [LY433632]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230633 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).