

Product datasheet for **RC214763**

PHF8 (NM_015107) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF8 (NM_015107) 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:	>RC214763 representing NM_015107 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCGGTGCCGGTGTATTGCCTCTGCCGGCTGCCTTACGATGTGACCCGCTTCATGATCGAGTGTG
ACATGTGCCAGGACTGGTTTCATGGCAGTTGTGTTGGTGTGAAGAGGAGAAGGCTGCTGACATTGACCT
CTACCACTGCCCAACTGTGAAGTCTTGCATGGGCCCTCCATTATGAAAAACGCCGTGGATCTTCAAAG
GGGCATGATACACACAAGGGGAAACCAGTGAAGACCGGGAGCCCTACGTTTCGTGAGAGACTCCGGAGTA
GGACTTTTGACAGCTCAGATGAAGTGATTCTGAAGCCCACTGAAATCAACTGACCGTGGAAATCCTGGA
AGAAAATAGTTCAGTGTGCCATCCTGGTCTGAAGAAGGATGGGTTGGGCATGACGCTGCCCTCGCCA
TCATTCAGTGTGAGGGATGTTGAACACTATGTTGGTCTGACAAAAGAGATTGATGTGATTGATGTGACCC
GCCAGGCTGACTGCAAGATGAAGCTTGGTATTGTTGAAATACTATTACAGCGGGAAGAGGGAGAAAGT
CCTCAATGTCAATAGTTTGGAAATCTCTGATACCAGACTTTCTAACCTTGTGGAGACACCGAAGATTGTT
CGAAAGCTGTGATGGTTCGAAAACCTTGTGGCCAGAGGAATGTGTCTTTGAGAGACCCAATGTACAGAAGT
ACTGCCTCATGAGTGTGCGAGATAGCTATACAGACTTTACATTGACTTTGGTGGCACCTCTGTCTGGTA
CCATGTACTCAAGGTGAAAAGATCTTCTACCTGATCCGCCCAACAAATGCCAATCTGACTCTCTTTGAG
TGCTGGAGCAGTTCCTTAATCAGAATGAGATGTTCTTTGGGGACCAGGTGGACAAGTGTACAAGTGT
CCGTGAAGCAAGGACAGACACTTTTCCACAGGGTGGATCCATGCTGTGCTGACGCCTGTGGACTG
CCTTGCCTTTGGAGGAACTTCTTACACAGCCTTAACATCGAGATGCAGCTCAAAGCCTATGAGATTGAG
AAGCGGCTGAGCACAGCAGACCTCTTACAGATCCCAACTTTGAGACCATCTGTTGGTATGTGGAAAGC
ACATCCTGGACATCTTTTCGCGTTCGAGAGAACAGGAGACACCCCTGCCTCCTACCTGGTCCATGGTGG
CAAAGCCTTGAACCTTGGCCTTTAGAGCCTGGACAAGGAAAGAAGCTCTGCCAGACCATGAGGATGAGATC
CCGGAGACAGTGCGAACCGTACAGCTCATTAAAGATCTGGCCAGGGAGATCCGCCTGGTGGAAAGACATCT
TCCAACAGAACGTTGGGAAAGACGAGCAATATCTTTGGGCTGCAGAGGATCTCCAGCCGGCTCCATTCC
CCTAACAGGCCAGCCATTCCACTTCAGTGTCCATGTCCAGGCTGCTCACTGCCCTCCAAAATGTTTCA



[View online »](#)

AAGAAGAAAGGCCTGAAGCCAAGGAAGCTTCAAGAAGGCAGAGCGAAAAGGGCAAGGAGAGTTCAGCCT
 TGGGGCCTGCTGGCCAGTTGAGCTATAATCTCATGGACACATACAGTCATCAGGCACTGAAGACAGGCTC
 TTTCCAGAAAGCAAAGTTCAACATCACTGGTGCCTGCTTGAATGACTCAGATGACGACTCACCAGACTTG
 GACCTTGATGAAATGAGAGCCATTGGCCCTATTGATGTCTAACGGCAGTACGAAAAGGGTGAAGATT
 TATCCAAATCTCGGCGAACCAAGATAGCAAAGAAGGTAGACAAGGCTAGGCTGATGGCAGAACAGGTGAT
 GGAAGACGAATTTGACTTGGATTGAGATGATGAGCTGCAGATTGACGAGAGATTGGGAAAGGAGAAGGCG
 ACCCTGATAATAAGACCAAAATTTCCCGGAAATTCGCCGTGCGAAGCCTTGCTGACCCCAACCGAG
 TTCGTGAACCAGGAGAAGTTGAGTTTGACATTGAGGAGGACTATACAACAGATGAGGACATGGTGGAAAG
 GGTGAAGGCAAGCTTGGGAATGGTAGTGGCGCTGGTGGCATTCTTGATCTGCTCAAGGCCAGCAGGCGAG
 GTGGGGGACCTGACTATGCTGCCCTCACCAGGCCCCAGCTTCTCCAGCACTCAGGAGGCCATCCAGG
 GCATGCTGTGCATGGCCAACTGCAGTCTCATCGTCTCACCAGGCTACCTTAGCCTGCAGGCTGGT
 GACTGGGGGACAGGATCGAAGCAGTGGGAGCTCCAGCAGTGGGCTGGGCACAGTGTCTAACAGTCTGCT
 TCCCAGCGCACCCAGGGAAGCGGCCATCAAGCGGCCAGCATACTGGAGAACCAGAGCGAGGAGGAGG
 AGGAGAACGCCAGTCTGGATGAACAGGACAGCTTGGGAGCGTCTCAAGGATGCAGAGTATATCTATCC
 TCACTGGAGTCTGATGATGATGACCTGCTTTGAAATCTCGACCAAGAAAAGAAGAAATTCAGATGAT
 GCTCCATGGAGTCTAAAGCCCGGTGACCCCACTCTGCCGAAGCAGGACCGTCTGTGCGTGAGGGGA
 CCCGGGTAGCCTCTATTGAGACAGTGGTGGCTGCAGCAGCTGCAAAGCTGGCCCAGCAGGAGCTACAGAA
 GGCCAAAAGAAGAAATATCAAGAAGAAGCCTTTGCTGAAGGAGGTAGAACAGCCTCGCCCTCAAGAC
 TCCAATCTCAGTCTGACAGTACCAGCCCCACTGTGGCTGCCACACCACAATTGTACCTCTCTCTCAC
 CCCTGCCTCTCTGAGCCTAAACAAGAGGCCCTGTGAGGAGTCTCGTGACCATGAGTACACCCTCG
 TCCCAATGCCTTTGGCATGGCCAGGCAAACCGCAGCACCACACCTATGGCCCCGGTGTCTTGTGACC
 CAGCGGCGCCCTTCAAGTGGCTCCAGAGCAATCAGGCAGGACAAGGAAAGCGTCCCAAAAAGGGCTGG
 CCACAGCAAAGCAGAGACTCGGCCGTATCTGAAAATCCACAGAAATGGCAAACACTTCTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTAA

Protein Sequence:

>RC214763 representing NM_015107
 Red=Cloning site Green=Tags(s)

MASVPVYCLCRLPYDVTFRMIECDMCQDWFHGSVCVGVVEEKAADIDL YHCPNCEVLHGPSIMKKRRGSSK
 GHDTHKGKPVKTGSPTFVRELRSRFDSSDEVILKPTGNQLTVEFLEENSFSVPIVLKDKLGMPLPSP
 SFTVRDVEHYVGSDEKIDVIDVTRQADCKMKLGDFVKKYYSKREKVLNVI SLEFSDTRLNLSLVETPKIV
 RKL SWVENLWPEECVFERPNVQKYCLMSVRDSYDFHIDFGGTSVWYHVLKGEKIFYLIRPTNANLTLFE
 CWSSSSNQNMFFGDQVDKCYKCSVKQQTFLIPTGWIHAVLTPVDCLAFGGNHLHSLNIEMQLKAYEIE
 KRLSTADLFRFPNFETICWYVGKHILDFRGLRENRRHPASYLVHGGKALNLAFAWTRKEALPDHEDEI
 PETVRTVQLIKDLAREIRLVEDIFQONVGKTSNIFGLQRIFPAGSIPLTRPAHSTSVSMSRLSLPSKNGS
 KKKGLKPKELFKKAERK GKESSALGPAGQLSYNLMDTYSHQALKTGSFQKAKFNITGACLNDSDDDDSPDL
 DL DGNESPLALLMSGSTKRKSLSKSRRTKIAKKVDKARLMAEQVMEDEFDLDSDELQIDERL GKEKA
 TLIIRPKFPRKLPRAKPCSDPNRVREPGEVEFDIEEDYTTDEDMVEGVEGKLGNGSGAGGILDLLKASRQ
 VGGPDYAALTEAPASPSTQEAIQMLCMANLQSSSSSPATSSLQAWWTGGQDRSSGSSSSGLGTVNSPA
 SQRTPGKRPIKRPAYWRTESEEEENASLDEQDSL GACFKDAEYIYPSLESDDDDPALKSRPKKKNSDD
 APWSPKARVPTLPKQDRPVREGTRVASIETGLAAAAAKLAQELQKAQKKKYIKKKPLLKEVEQPRPQD
 SNLSLTVPAPTVAATPQLVTSSSPLPPPEPKQEALSGSLADHEYTARPNAFGMAQANRSTTPMAPGVFLT
 QRRPSVGSQSNQAGQGKRPKGLATAKQRLGRILKIHRNGKLLL

SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

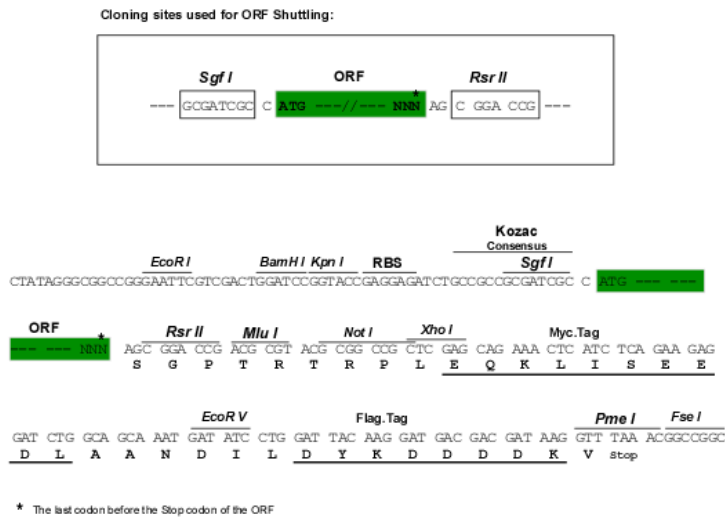
Chromatograms:

https://cdn.origene.com/chromatograms/mg4397_e07.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_015107

ORF Size: 3072 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_015107.3](#)

RefSeq Size: 5776 bp

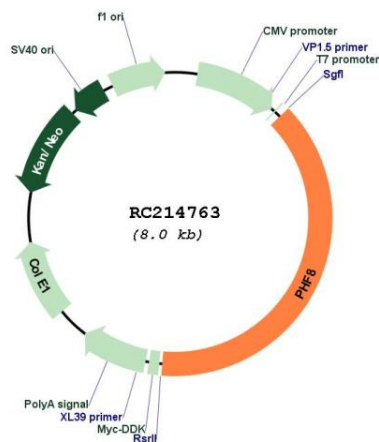
RefSeq ORF: 3075 bp

Locus ID: 23133

UniProt ID: [Q9UPP1](#)
 Cytogenetics: Xp11.22
 Protein Families: Druggable Genome, Transcription Factors
 MW: 113.7 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 RC214763