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Product datasheet for RG214763

PHF8 (NM_015107) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF8 (NM_015107) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHF8
Synonyms:	JHDM1F; KDM7B; MRXSSD; ZNF422
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG214763 representing NM_015107
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTCGGTGCCGGTGTATTGCCTCTGCCGGCTGCCTTACGATGTGACCCGCTTCATGATCGAGTGTG
ACATGTGCCAGGACTGGTTTCATGGCAGTTGTGTTGGTGTTGAAGAGGAGAAGGCTGCTGACATTGACCT
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TCATTCACTGTGAGGGATGTTGAACACTATGTTGGTTCTGACAAAGAGATTGATGTGATTGATGTGACCC
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CCTCAATGTCATTAGTTTGGAATTCTCTGATACCAGACTTTCTAACCTTGTGGAGACACCGAAGATTGTT
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CCTAACCAGGCCAGCCCATTCCACTTCAGTGTCCATGTCCAGGCTGTCACTGCCCTCCAAAAATGGTTCA

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AAGAAGAAAGGCCTGAAGCCCAAGGAACTCTTCAAGAAGGCAGAGCGAAAGGGCAAGGAGAGTTCAGCCT
TGGGGCCTGCTGGCCAGTTGAGCTATAATCTCATGGACACATACAGTCATCAGGCACTGAAGACAGGCTC
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CAGCGGCGCCCTTCAGTTGGCTCCCAGAGCAATCAGGCAGGACAAGGAAAGCGTCCCAAAAAGGGCCTGG
CCACAGCAAAGCAGAGACTCGGCCGTATCCTGAAAATCCACAGAAATGGCAAACTACTTCTG

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG214763 representing NM_015107
Red=Cloning site Green=Tags(s)

MASVPVYCLCRLPYDVTRFMIECDMCQDWFHGSCVGVEEEKAADIDLYHCPNCEVLHGPSIMKKRRGSSK
GHDTHKGKPVKTGSPTFVRELRSRTFDSSDEVILKPTGNQLTVEFLEENSFSVPILVLKKDGLGMTLPSP
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RKLSWVENLWPEECVFERPNVQKYCLMSVRDSYTDFHIDFGGTSVWYHVLKGEKIFYLIRPTNANLTLFE
CWSSSSNQNEMFFGDQVDKCYKCSVKQGQTLFIPTGWIHAVLTPVDCLAFGGNFLHSLNIEMQLKAYEIE
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KKKGLKPKELFKKAERKGKESSALGPAGQLSYNLMDTYSHQALKTGSFQKAKFNITGACLNDSDDDSPDL
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SQRTPGKRPIKRPAYWRTESEEEEENASLDEQDSLGACFKDAEYIYPSLESDDDDPALKSRPKKKKNSDD
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SNLSLTVPAPTVAATPQLVTSSSPLPPPEPKQEALSGSLADHEYTARPNAFGMAQANRSTTPMAPGVFLT
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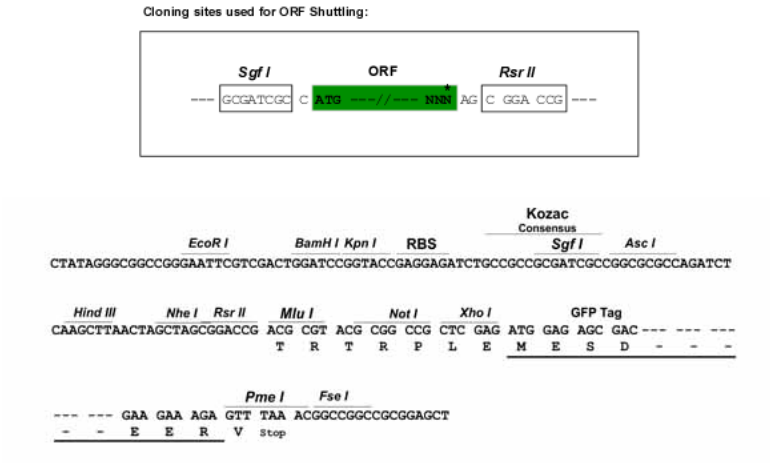
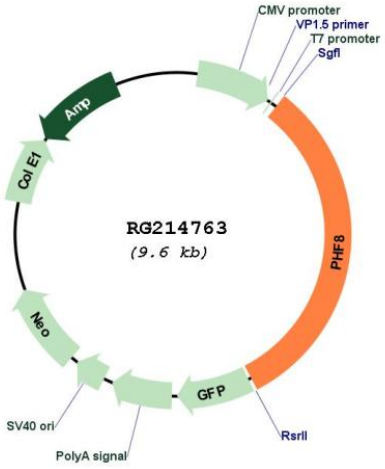
SGPTRTRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



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
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]