

Product datasheet for **RG230633**

PHF8 (NM_001184896) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHF8 (NM_001184896) 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:	>RG230633 representing NM_001184896 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACAGGAGCCGCGCTATCGTCCAGAGAGGACGCGTGCTGCCGCTCCCGCCCTCTTGACACGACGA
ACCTGGCCGGCCGACAGACGCTCCAGGGCCGAGCGAAGATGGCCTCGGTGCCGGTGTATTGCCTCTGCCG
GCTGCCTTACGATGTGACCCGCTTCATGATCGAGTGTGACATGTGCCAGGACTGGTTTCATGGCAGTTGT
GTTGGTGTGAAGAGGAGAAGGCTGCTGACATTGACCTCTACCACTGCCCAACTGTGAAGTCTTGACATG
GGCCCTCCATTATGAAAAACGCGTGGATCTTCAAAGGGGCATGATACACACAAGGGGAAACCAGTGAA
GACCGGGAGCCCTACGTTTCGTCAGAGAGCTCCGGAGTAGGACTTTTGACAGCTCAGATGAAGTATTCTG
AAGCCCACTGGAAATCAACTGACCGTGAATTCCTGGAAGAAAATAGCTTCAGTGTGCCATCCTGGTCC
TGAAGAAGGATGGGTGGGCATGACGCTGCCCTCGCCATCATTACTGTGAGGGATGTTGAACACTATGT
TGGTCTGACAAAGAGATTGATGTGATTGATGTGACCCGCCAGGCTGACTGCAAGATGAAGCTTGGTGAT
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CCAGACTTTCTAACCTTGTGGAGACCCGAAGATTGTTGAAAGCTGTGATGGGTGAAAACCTTGTGGCC
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TTTGGGCTGCAGAGGATCTTCCCAGCCGGCTCCATTCCCCTAACCAGGCCAGCCATTCCACTTCAGTGT
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 AAAATCCACAGAAATGGCAAACACTTCTG

AGCGGACCGACCGTACCGCGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230633 representing NM_001184896

Red=Cloning site Green=Tags(s)

MNRSRAIVQRGRVLPPLDITNLAGRRTLQGRAKMASVPVYCLCRLPYDVTRFMIECDMCQDWFHGSC
 VGVVEEKAADIDLHYCPNCEVLHGPSIMKKRRGSSKGDHDKGPKVKTGSPTFVRELRRTFDSSDEVIL
 KPTGNQLTVEFLEENSFSVPILVLKKGDLGMLTSPSFTVRDVEHYVGSDEIDVIDVTRQADCKMKLGD
 FVKYYYSGKREKVLNVISLEFSDTRLNLVETPKIVRKL SWVENLWPEECVFERPNVQKYCLMSVRDSYT
 DFHIDFGGTSVWYHVLKGEKIFYLIRPTNANLTLFECWSSSNQEMFFGDQVDKCYKCSVKQGQTLFIP
 TGWIHAVLTPVDCLAFGGNLFHSLNIEMQLKAYEIEKRLSTADLFRFPNFETICWYVGHILDFRGLRE
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 MDTYSHQALKTGFSQKAKFNITGACLNDSDDSDPLDLGNE SPLALLMSGSTKRKSLSKSRRTKIAK
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 EEDYTTDEDMVEGVEGKLGNGSGAGGILDLLKASRQVGGPDYALTEAPASPSTQEAIQGMLCMANLQSS
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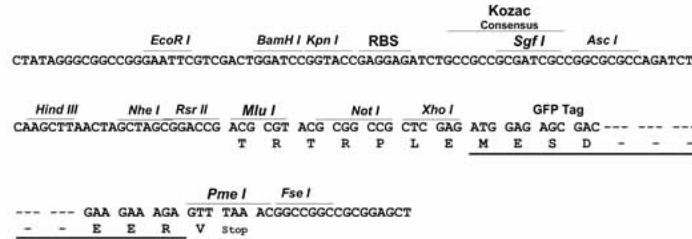
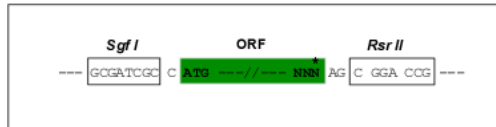
SGPTRRRLE - GFP Tag - V

Restriction Sites:

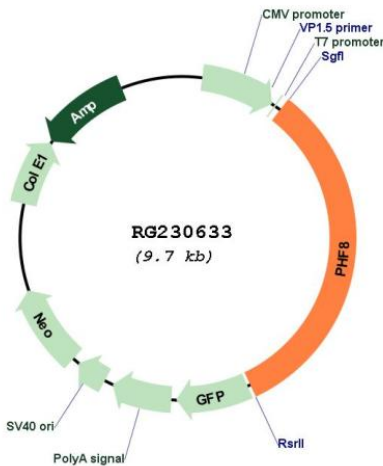
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



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:	<ol style="list-style-type: none"> 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 Size:	5921 bp
RefSeq ORF:	3183 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]