

Product datasheet for MR212701

Hpf1 (NM_028299) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hpf1 (NM_028299) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hpf1
Synonyms:	2700029M09Rik; C4orf27; C230006B22Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR212701 representing NM_028299 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGTTGGCGGTGGCGGGAAGCGCCGGACGGCCGGGGCGGGACCGCAGTGTGAAAAGACAGTTGAGGTGA
AGAAGAGTAAGTTTTCTGAGGCTGATGTCTCCAGTGACCTTCGAAAAGAAGTGGAAAATCTTTATAAGCT
TTCAGTGCCTGAAGATTCTATCATTTCTGGAAGTTCTGTGAAGAGCTTGATCCTGAAAAGCCAGCTGAT
GCGCTTGCCACAAGCCTGGTCTTCGGTTAGTGGTCCTATGATATCCTTGCTGGGAAACATAAAATGA
AGAAAAACCCACAGGCTTGAAGTGAATCTTCACTGGAGTTTTACTATGACCCTCCTGAGTTCAGAC
CATTATTATTGGAGATAATAAACTCAGTACCACATGGGGTATTTCAAGGATTCTCCTGATGAACCTCCT
GTATACGTGGGTACAAATGAAGCAAAGAAAAATTGTATAATTATTCAAAATGGAGACAATGTGTTTGCTG
CCATCAAATTTTAAATGAAAAACTCAAAGAAGTAACAGATAGAAAAGAAAATTAGCATTTTGAAAA
CATAGATGAAAAACTCACAGAAGCAGCCAGAAAAGTAGGATACTCACTGGAACAGAGAACCGTGAAGATG
AGACAGAGAGATAAGAAGTTGTGACAAAGACTTTTCATGGTGCAGGCTTGGTTGTTCCAGTAGATAAAA
ATGATGTTGGTTACCGAGAGCTCCCTGAAACAGATGCTGACCTTAAGAGAATCTGCAAGGCAGTTGTCGA
CGCTGCAAGCGACGAGGAGAGACTGAAAGCATTTCGCTCCCATTCAGGAGATGATGACTTTTGTGCAGTTT
GCTAATGATGAGTGTGATTATGGCATGGGCTGGAATTAGGAATGGACCTTTTTGCTATGGCTCTCATT
ATTTTCACAAAGTTGCTGGTCAGCTTTTACCTCTTGCATATAATCTATTGAAGAGGGATCTGTTTGCAAA
AATTATTGAAGATCATCTGGCAAGCAGAAGTGAAGAGAACATAGACCAGCTTGCAGGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR212701 representing NM_028299
Red=Cloning site Green=Tags(s)

MVGGGGKRRTAGAGPQCEKTVEVKKSKFSEADVSSDLRKEVENLYKLSLPEDFYHFWKFCEELDPEKPAD
 ALATSLGLRLVGPYDILAGKHKMKKPTGLNCLHWRFYDPPFQTIIIGDKTQYHMGYFRDSDPELP
 VYVGTNEAKKNCIIIQNGDNVFAAIKFLMKLKEVTDKRKISILKNIDEKLEAARKLGSLEQRTVKM
 RQRDKKVVTKTFHGAGLVVPVDKNDVGYRELPEADLKRICKAVVDAASDEERLKAFAPIQEMMTFVQF
 ANDECDYGMGLELGMDLFCYGSYFHKVAGQLLPLAYNLLKRDLEAKIIEHDLASRSEENIDQLAG

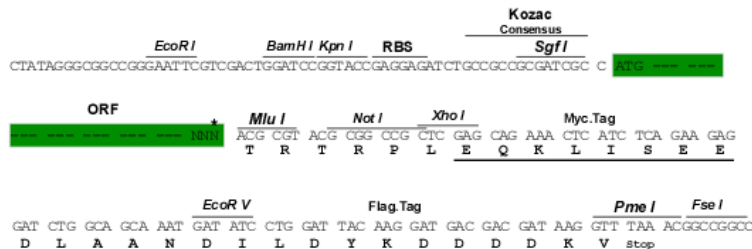
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9061_b04.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_028299

ORF Size: 1038 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_028299.3](#)

RefSeq Size: 1210 bp

RefSeq ORF: 1041 bp

Locus ID: 72612

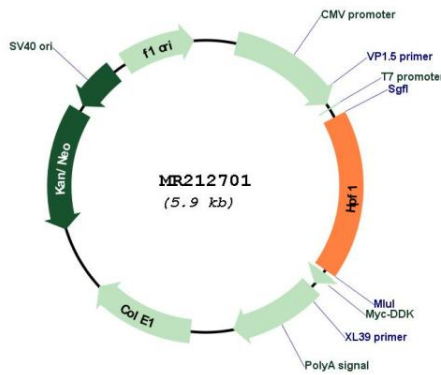
UniProt ID: [Q8CFE2](#)

Cytogenetics: 8 B3.1

MW: 39.3 kDa

Gene Summary: Acts as a cofactor for serine ADP-ribosylation by conferring serine specificity on PARP1 and PARP2: interacts with PARP1 and PARP2 and is able to change amino acid specificity toward serine. Promotes histone serine ADP-ribosylation in response to DNA damage, limiting DNA damage-induced PARP1 hyper-automodification, and ensuring genome stability. Serine ADP-ribosylation of proteins constitutes the primary form of ADP-ribosylation of proteins in response to DNA damage. HPF1 also promotes tyrosine ADP-ribosylation, probably by conferring tyrosine specificity on PARP1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR212701