

## Product datasheet for **MG216054**

### HephII (NM\_001164797) Mouse Tagged ORF Clone

#### Product data:

<b>Product Type:</b>	Expression Plasmids
<b>Tag:</b>	TurboGFP
<b>Symbol:</b>	HephII
<b>Synonyms:</b>	Gm509; Zp; zyklopen
<b>Mammalian Cell Selection:</b>	Neomycin
<b>Vector:</b>	pCMV6-AC-GFP (PS100010)
<b>E. coli Selection:</b>	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG216054 representing NM\_001164797  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGCATCGCC

ATGTTTCTGAAGCAGCCGGGTGGTGCATCCTTCTCCAGTTCTGGGTCTGCTTGGACTAGTTGGTGCAG  
TCACCAAGAACATACTACATTGGGATTTGGGAGGAATACTGGAACATATGTGCCTCAAGGGAAGGATGTTAT  
TACCGGAAGAGTTTCTCAGAAGACAACTTGCACCTTATTTCTGGAGCGAGGGCCCAACAGGATAGGT  
GGGATCTACAAGAAGCGGTTTATAGACACTTCACAGATGGGAGCTACTCCACGGAGATCCCAAACCC  
CCTGGCTGGGTTTCTGGTCCCCTCTGAGGGCAGAAGTGGGAGACGTATCGTTATCCACCTGATGAA  
CTTTGCTTCCAGACCTTCTCTTTGCACCTCACGGTGTCTTCTACGACAAGGATTCGGAAGGAGCCTTA  
TACCCAGATGGGACATCTGGAAGGAACAAGGAAGATGACATGGTCCCCCTGGCAAAAACACTACACCTATG  
TCTGGCCAGTGAGAGAAGAATATGCACCTGCTCCAGCAGATGCCAACTGCCTGACCTGGGTGTACCACTC  
ACACATTGATGCCCTAAGGATATCTGCTCTGGGCTAATTGGCCCCCTGCTGGTGTGTAAGGAAGGTGTA  
CTGAATAGATACTCAGGATGAGGACTGATGTGGACCGAGAGTTTGTATCATGTTCACTCTTGTGGATG  
AGAACCAGAGCTGGTATCTGGATGACAACATCAAGCAATTCTGCACTAATCCAAATCCGTTGACAAAAG  
TGATGCTGTTTTCCAGAGGAGCAACAAGATGCATGCCCTCAATGGATTCTTTTTGGAAACATGCCTGAG  
CCTGAGATGTGCGTTGGCGAATCTGTGCTCCTGGCACCTGTTTGGGATGGGGAATGAGATAGACATCCATT  
CCATCTATTTTTATGGTAACACCTTCATCACCAGAGGGCACCGGGCAGATGTTGTCAACCTGTTTCCAGC  
TACCTTCTCACAACAGAAATGATAGTGGAGAATCCTGGGAAATGGATGATAACCTGCCAAGTCAGTGAC  
CACCTGCAAGCTGGTATGCTGGGACAGTACAGCGTGGCAACTGCAGGGGTAATGCTCCTCACCCAAAGG  
TGCAGGGTCAACAGCGGCGCTACTTCATAGCGGCTGAAAAAGTCTCTGGGATTATGGTCCCAAGGCTA  
TGATAAATCACTGGATTTCCCTGAATACATCTGGCAGTGACTCTGCAGTGTACTTCACACAAGCTGAC  
AACAGAATAGGAGGAAAATATTGGAAGGCTCGGTACACGGAGTATGTTGATGCCACTTTCAGTAGAAGAA  
AGATGCCCTCTGATTCAGAAGCCATCTTGGAAATCCTTGGTCCAGTCATCAAAGCAGAGGTGGGTGACAT  
CCTGCTAGTGACCTTTGCCAACAAAGCTGACAAAGTCTACAGCATCTTACCCCATGGCGTGTCTATGAC  
AAAGCATCAGATGCAGCTCCAATGTAGATGGATTTCTGAAACCAGGGGCTCACGTCAAGCCAGGTGAAA



CCTTCACCTACAGGTGGACAGTGCCAGAAAGCGTCAGCCCGACAGATGAAGACCCCGTGCCTGACCTA  
 TCTTTACTTCTCAGCGTCCAGCCTATCAAGGACACTAGTGTGGGCTTGTGGGCCTTTGTTGGTCTGC  
 AAAAAAGGCACGCTCAATGCCGATGGGACACAGAAAGGAATAGACAAGGAATTTACCTACTGTTACAG  
 TCTTTGATGAGAATTTACGACGCTATCTTGATGAAAAACATCAAAAAGTTTACTTGGCATCCCTTCAAGT  
 TGACAAAGAAGACAAGGAGTTTGTGAAATCCAATCGGATGCATGCTGTTAACGGCTACATGTACGGCAGC  
 CAGCCAGGCCTGAGCATGTGCAAGAAGGACAGAGTTTCTGGCACTTGATTGGAATGGGCACCGACACAG  
 ATATGCATGGAGTTTATTTCCAAGGCAACACCATCCACCTACGAGGGACTCATCGTACTCCCTGGCTCT  
 GTTTCGCCATATGGCCACAACGGCATAATGCAGCCAGACCATTCAAGTATTTTCAAGGTGTTCTGTTCC  
 ACCTTACCCCACTTACGAGAGGCATGGGTGAGATCTATGAGATCAGCAGCTGTGGCAACAGGGACCCCT  
 CTGAGCCGCGCTACGGGATGCTAAGAACCTTTTTCATCGCCGCTGAAGAGGTAGAATGGGATTATGCCCC  
 TAACAAAACTGGGAGTTCGAAAAGCAGCACTTGGACGAGGAGGGAAAGACATGGAGATATATTTATG  
 AACCCACATGAAAAGTGGATTGGCTCAGTACAGGAAGTTGTTTATAGGGAATATACAAAATGGGAAT  
 TTGTGGAGATTAAGCTCGCCACCTCAAGAAGAGCACCTTCAACTCCTGGGACCAATGATTCATGCTGA  
 GGTGGGGACTCCATTCTATTCTTTAAGAACAAGCCAGCCGCGCCCTACTCCATTGCAGCCCAAGGT  
 GTGGAGGACTCAAACAATGAAAACCTTAATGTGCCTGTCAAAGCCAGGAGAAATCAAACCTTACA  
 GATGGAATGTCCCAGAGATCCGGTCTGGGCCCTCTGATCCCAATTGATTCCATGGGTTTACTTTTC  
 AACAGCAAAATTTGTGAAGGATACATACAGTGGTTTGTGAGGCGCTCTGATCACATGTGAGAGGGGGT  
 CTAACGAAAAGGGAAGAAGAAGCGATGTTGACTATGAGTTTGCCTGTTGTTCTGGTCTTCAATGAGA  
 ATGAGTCATGGTATCTGGATGACAAATCAAGAAGTATCTCAATAAAGATCCACGGGATTTCAAGCAC  
 AGACGACTTTGAAGAGAGCAACAAAATGCATGCCATTAATGGAAAAGATTTTGGAAAACCTCCCTGGTCT  
 ATAATGACTGAAGACTCAATGACTAACTGGTATCTGCTGGGCATCGGAAGTGAAGTGGACATACACACAA  
 TCCATTACCATGCAGAGAGCTTTCTGTTCAAAATAGATAAGTCTACCGAGAAGATGTGATGATCTCTT  
 TCCTGGGACATTTCAAACCTTGGCTGTTGCTGATCACCAGGAACATGGCTTCTTCACTGCCATGTG  
 TCCGACCACATTCATGCTGGCATGGAGACCACCTACACTGTCTCAGGAACATAGACAACAGGATCCAT  
 ATTCTACCAAGACGCTTCTGGAGCAGGATCTCACGAGTCAAGTGCCTCCAGGAACAACCTGGCAA  
 GGAAGAGCTCTATTTCTTTGGCAAGAACTGCGTCCAAGAGGAGCAAGGCAGCCCTGGTCACTCTTTTC  
 ATCCTGGGACTCCTCTCTAGTGGCCACCGTGGTTCTCGCCCTCAGACTCCGATCTTCAAGGAGGCAGA  
 TGGCTTACAGGGAAGTCCAGTCTGTGCACTCCCACGGATGCTCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

**Protein Sequence:**

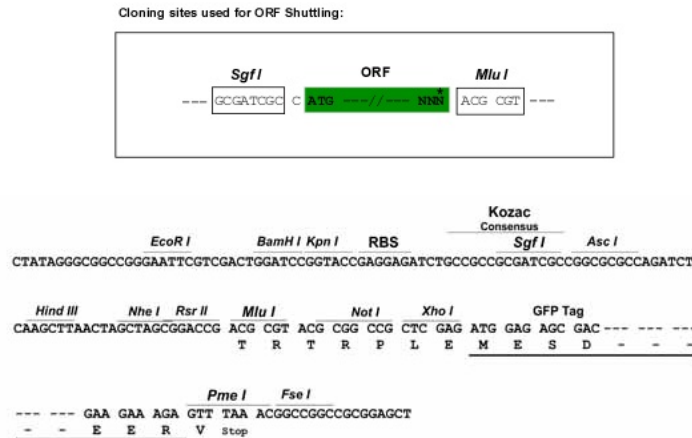
>MG216054 representing NM\_001164797  
 Red=Cloning site Green=Tags(s)

MFLKQPGGICLLQFLGLLGLVAVTRTYIIGIVEEYWNYPQGDVITGKSFSEDKLATLFLERGPNRIG  
 GIYKKAIVYRHFTDGSYSYTIKPPWLGFLGPIILRAEVDVIVIHLMNFA SRPFLPHPGVFYDKDSEGL  
 YPDGTSGRNKEDDMVPPGKNYTYVWPVREEYAPAPADANCLTWVYHSHIDAPKIDICSLIGPLLVCKEYV  
 LNRYSGMRTDVDREFVIMFTLVENQSWYLDNLIKQFCTNPNSVDKSDAVFQRSNKMHALNGFLFGNMP  
 PEMCVGESVSWHLFGMGNEIDIHSIYFYGNFTITRHRADVNLFPATFLTTEMIVENPGKWMITCQVSD  
 HLQAGMLGQYSVGNCRGNAPHPKVQGGQRRYFIAAEKVLWDYGPQGYDKFTGFPLNTSGSDSAVYFTQAD  
 NRIGGKYWKARYTEYVDATFSRRKMPDSEAHLGILGPVIAEVDGILLVTFANKADKVYSILPHGVFYD  
 KASDAAPNVDGFLKPGAHVKPGETFTYRWTVPESVSPTEDEPPCLTYLYSAVQPIKDT SAGLVGPLLVC  
 KKGTLNADGTQKGIDKEYLLFTVFDENFSSYLDENIKKFTWHPF SVDKEDKEFVKSNRMHAVNGYMYGS  
 QPGLSMCKKDRVSWHLIGMGTDDMHGVYFQGNTHLRTGTHRSLALFPHMATTAYMQPDHSGIFKVFCS  
 TLPHFTRGMQIYEISSCGNRDPSEPPYGMRLTFFIAAEEVEWDYAPNKNWFEKQHL DAGGERHGDIFM  
 NHTENWIGSQYRKVVYREYNGEFVEIKARPPQEEHLQLLGPMIHAEVGDSSILIIIFKNKASRPYSIAAQG  
 VEDSNNGKLLNVPVTKPGEIKTYRWNVPKRSGPSPDNCIPWVYFSTANFVKDYSGLMGPLITCREGV  
 LNEKGRSDVDYEFALLFLVFENESWYLDNLIKYLKNDPRDFKHTDDFEESNMHAIKNGIFGNLPLG  
 IMTEDSMTNWYLLGIGSEVDIHTIHYHAESFLFKIDKSYREDVYDLFPGTFQTIELFADHPGTWLLHCHV  
 SDHIHAGMETTYTLRNIIDNRIPIYSTKTPSGAGSHAVTVPSQEQPKEELYFFGKNLRPRGAKAALVILF  
 ILGLLLLVATVVLALRLRSSRRQMA YREVQSCALPTDAL

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001164797

**ORF Size:** 3477 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001164797.1](#), [NP\\_001158269.1](#)

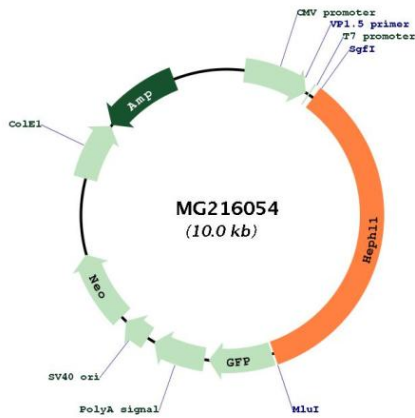
RefSeq Size: 5261 bp  
 RefSeq ORF: 3480 bp  
 Locus ID: 244698

UniProt ID: [Q3VIH3](#)

Cytogenetics: 9 A2

Gene Summary: May function as a ferroxidase and may be involved in copper transport and homeostasis.  
 [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG216054