

Product datasheet for **MG216667**

Dph1 (NM_144491) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dph1 (NM_144491) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dph1
Synonyms:	2310011M22Rik; 4930488F09Rik; AW551873; Dph2l1; Ovca1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216667 representing NM_144491 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCTGGTTGTGTCGAGACTGCGGAGCCAGGAAGCCGAGTCGGCCCTGGCAGAGGTGCGCATCT
CTCGGGGGCGACTGGCCAATCAGATCCCCCTGAGGTCTGAACAACCCAGTTACAGGCTGCTGTCCA
AGTTCTGCCTTAACTACAACCTTGAGATCCCCAAAACCATCTGGAGAATCCAGCAGGCCAGGCCAAG
AAGGTGGCCTTACAAATGCCAGAAGCCCTCTCTCTTTGCTGCACTATTGTGGATATCTGGAAAGGT
TCACAGAGGCTGAGGTGATGGTGTGGTGTGTCACCTATGGGGCTTGCTGTGGATGACTTCACTGC
AAGGGCCTTGGGAGTTGACTTCCCTGGTGCATATGGTCACAGCTGTCTAGTCCCATGGACACCTCCGTT
CAAGACTTCCGAGTCTTGTATGTCTTCTGGATATCCGGATAGACTGCCACCTTCTGGACTCGGTCC
GCCTCACCTTTACCCAGGCAGCTCACTCGCTCTGGTCAGCACCATTAGTTTGTGTCAACCTTACAGGC
AGCTGCACAGGAGCTGAAAGCTGATTATCATATCAGTGTCCCACAGTGAAGCCCTGTCCCCTGGGGAG
ATCCTAGGCTGCACATCCCCTCGGCTATCCAAGGAAGTGAAGCTGTTGTGTATCTTGGAGATGGCCGCT
TTCATCTGGAGTCTGTCATGATTGCCAACCTAATATACCTGCTTACCGGTATGACCCATATGGCAAAGT
CCTATCCAGAGAATACTATGACCATCAGCGCATGCAGGCCACTGCCAGGAAGCCATTGCTGCTGCACGC
TCAGCCAAATCTGGGGCCTTATTCTGGGAACCTTGGCCCGCAGGCCAGTCCAAGATCCTGGAGCAT
TGGAAATCTCAGCTCAGAAACTTGGGACTTCCTTTCGTGAGGCTGTTGCTCTCTGAGATCTCCCCAGCAA
GCTCAGTCTACTTCTGAGGTGGATGTGTGGTGCAGGTGGCATGTCCACGCCTCTCCATTGACTGGGGT
TCAGCCTTTCCCAAGCCACTGCTGACACCGTACGAGGCAGCTGTGGCCCTGAAGGACATTTCTTGGCAGC
AACCTACCCATGGACTTCTACTCTGGCAGCTCCTTAGGGCCATGGACAGTGAAGTACGGTCCGGACCG
AGCACCTCGGGTCTCTGCCAGCCTGCATCTGACAAGGTGCAGCAAGGGTCCAGAGGCGGCTCTCCAGCC
CCAGCCTGTGAGAGTTGCAACTGCGCAGACCAGAAGGCTACTTCGCCGGCTCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >MG216667 representing NM_144491
Red=Cloning site Green=Tags(s)

```

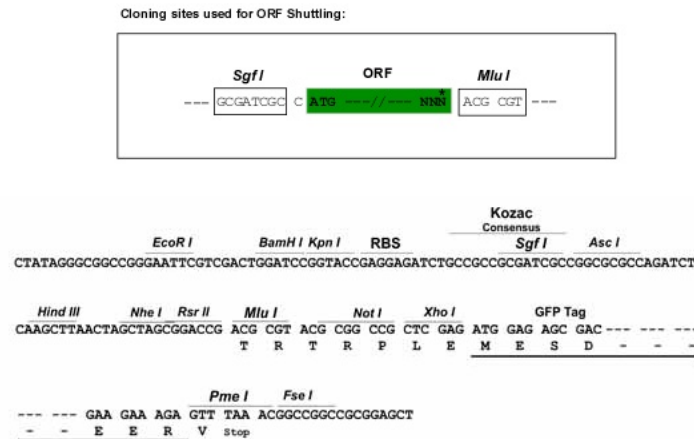
MAALVVSETAEPGSRVGPGRGRISRGLANQIPPEVLNNPQLQAAVQVLPSNYNFEIPKTIWRIQQAQAK
KVALQMPEGLLLFACTIVDILERFTEAEVMVMGDVTYGACCVDDFTARALGVDFLVHYGHSLVPMDSV
QDFRVLVYFVDIRIDTAHLLDSVRLTFTPGSSLALVSTIQFVSTLQAAAQELKADYHISVPQCKPLSPGE
ILGCTSPRLSKEVEAVVYLGDRGFHLESVMIANPNIPAYRYDPYGVKVL SREYYDHQRMQATRQEIAAAR
SAKSWGLILGTLGRQSPKILEHLESQLRNLGLPFVRLLLSEIFPSKLSLLPEVDVWVQVACPRLSIDWG
SAFPKPLLTPYEAAVALKDISWQQPYPMDFYSGSSLGPWTVNYGRDRAPRGLCQPASDKVQQGSRGGSPA
PACESNCADQKATSPAP
    
```

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_144491

ORF Size: 1314 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_144491.2](#), [NP_652762.2](#)

RefSeq Size: 2103 bp

RefSeq ORF: 1317 bp

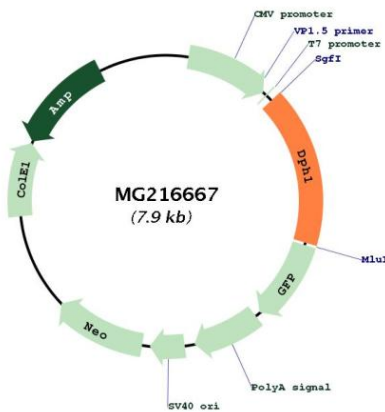
Locus ID: 116905

UniProt ID: [Q5NQC5](#)

Cytogenetics: 11 45.76 cM

Gene Summary: Required for the first step in the synthesis of diphthamide, a post-translational modification of histidine which occurs in translation elongation factor 2 (EEF2). Acts also as a tumor suppressor in lung and breast cancers. Plays a role in embryonic growth, organogenesis and postnatal survival. When overexpressed, suppresses colony formation ability and growth rate of ovarian cancer cells (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216667