

## Product datasheet for **MR216667**

### **Dph1 (NM\_144491) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dph1 (NM_144491) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dph1
Synonyms:	2310011M22Rik; 4930488F09Rik; AW551873; Dph2l1; Ovca1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR216667 representing NM\_144491  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGCGCTGGTTGTGTCCGAGACTGCGGAGCCAGGAAGCCGAGTCGGCCCTGGCAGAGTCCGATCT  
 CTCGGGGCGACTGGCCAATCAGATCCCCCTGAGGTCCTGAACAACCCCAATACAGGCTGCTGTCCA  
 AGTTCTGCCTTCTAACTACAACCTTGTAGATCCCCAAAACCATCTGGAGAATCCAGCAGGCCAGGCCAAG  
 AAGGTGGCCTTACAAATGCCAGAAGGCCTCCTCCTCTTTGCTGCACTATTGTGGATATCTTGGAAAGGT  
 TCACAGAGGCTGAGGTGATGGTATGGTATGTCACCTATGGGGCTTGTGTGGATGACTTCACTGC  
 AAGGGCCTTGGGAGTTGACTTCTGTTGCACTATGGTACAGCTGTCTAGTCCCATGGACACCTCCGT  
 CAAGACTCCGAGTCTTGTATGTCTTCGTGGATATCCGGATAGACTGCCACCTTCTGGACTCGGTCC  
 GCCTCACCTTTACCCAGGCAGCTCACTCGCTGGTTCAGCACCATTAGTTTGTGTCAACCTTACAGGC  
 AGCTGCACAGGAGCTGAAAGCTGATTATCACATCAGTGTCCACAGTGAAGCCCTGTCCCTGGGGAG  
 ATCCTAGGCTGCACATCCCTCGGCTATCCAAGGAAGTGAAGCTGTTGTGTATCTTGGAGATGGCCGCT  
 TTCATCTGGAGTCTGTATGATTGCCAACCTAATATACCTGCTTACCGGTATGACCCATATGGCAAAGT  
 CCTATCCAGAGAATACTATGACCATCAGCGCATGCAGGCCACTCGCCAGGAAGCCATTGCTGCTGCACGC  
 TCAGCCAAATCCTGGGCCTTATCTGGGAACCTTGGGCCGCCAGGGCAGTCCCAAGATCCTGGAGCACT  
 TGGAAATCAGCTCAGAAACTTGGGACTTCTTTCTGAGGCTGTTGCTCTCTGAGATCTTCCCAGCAA  
 GCTCAGTCTACTTCTGAGGTGGATGTGTGGTGCAGTGGCATGTCCACGCCTTCCATTGACTGGGGT  
 TCAGCCTTTCCCAAGCCACTGCTGACACCGTACGAGGCAGCTGTGGCCCTGAAGGACATTTCTTGGCAGC  
 AACCCATACCCATGGACTTCTACTCTGGCAGCTCCTTAGGGCCATGGACAGTGAAGTACGGTCCGGACCG  
 AGCACCTCGGGGTCTCTGCCAGCCTGCATCTGACAAGGTGCAGCAAGGGTCCAGAGGCGGCTCTCCAGCC  
 CCAGCCTGTGAGAGTTGCAACTGCGCAGACCAGAAGGCTACTTCGCCGGCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR216667 representing NM\_144491  
 Red=Cloning site Green=Tags(s)

MAALVVSETAEPGSRVGPGRGRISRGLANQIPPEVLNNPQLQAAVQVLPSNYNFEIPKTIWRIQQAQAK  
 KVALQMPPEGLLLFACTIVDILERFTEAEVMVMGDVYTGACVDDFTARALGVDFLVHYGHSLVPMDSV  
 QDFRVLVYFVDIRIDTAHLLDSVRLTFPGSSLALVSTIQFVSTLQAAAQELKADYHISVPQCKPLSPGE  
 ILGCTSPRLSKEVEAVVYLDGRFHLESVMIANPNIPAYRYDPYGVKLSREYYDHQRMQATRQEAIAAAR  
 SAKSWGLILGTLGRQGSPILEHLESQRLNGLPFVRLLLSEIFPSKLSLLPEVDVWVQVACPRLSIDWG  
 SAFPKPLLTPEAAVALKDISWQPYPMDFYSGSSLGPWTVNYGRDRAPRGLCQPASDKVQQGSRGGSPA  
 PACESCNCADQKATSPAP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9045\\_c08.zip](https://cdn.origene.com/chromatograms/mm9045_c08.zip)

**Restriction Sites:**

Sgfl-Mlul

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

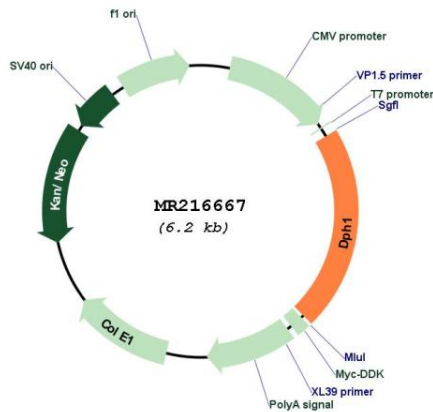
UniProt ID: [Q5NCQ5](#)

Cytogenetics: 11 45.76 cM

MW: 48.5 kDa

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 MR216667