

Product datasheet for **RC201382**

DPH2 (NM_001384) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DPH2 (NM_001384) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DPH2
Synonyms:	DPH2L2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC201382 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGTCGATGTTTAGCAGCCCTGCCGAGGCGCGCTGCAGCGAGAGACCGGGTGCCAGGACTGCTTA
 CTCTCTTCCGGACCTGGACGGAGTGTACGAGCTGGAGCGAGTCGCTGGATTTGTCCGCGACCTGGGGTG
 TGAACGAGTTGCCTTGCAGTTCCCTGACCAGCTATTGGGAGATGCTGTGGCTGTGGCTGCACGACTGGAG
 GAGACGACAGGGTCAAAGATGTTCACTTCTGGGTGACACAGCCTACGGCAGCTGCTGCGTGGATGTCTGG
 GTGCTGAGCAAGCTGGAGCTCAGGCTCTCATACATTTTGGCCCTGCCTGCTTAAGCCCTCCAGCCGCC
 ACTGCCGTTGCCTTCGTGCTTCGTCAACGTTCTGTGGCCTTGGAGCTCTGTGTCAAGGCCCTTGGAGCC
 CAGAACCAGACCCAAAGCGCCTGTGGTGTCTGAGTGTGAGCCGGCCTGTGCCATGCCCTGGAGGCTT
 TGGCTACTCTCCTGCGCCACGGTACCTGGACCTGCTAGTCTCCAGCCAGCTTTTCCCAACCAGTGGG
 TTCCCTGAGTCCAGAGCCTATGCCCTAGAGCGTTTTGGGCGCCGCTTCCCCCTTGCCCCAGGGAGGCGT
 CTAGAAGAGTATGGTGCCTTCTATGTAGGGGGCTAAGGCCAGCCCTGACCCAGACCTTGACCCAGACC
 TGAGTCGGCTGCTTGGGGTGGGACCAAGTCAACCCTTCTCCTCTGCTGTCCAGATACAGGGAAGAC
 TCAGGATGAGGGTGCCCGGGCTGGACGGCTAAGGGCACGAAGACGATATCTGGTAGAGAGGGCCAGAGAT
 GCCCGCTGGTAGGGCTGCTGGCAGGCACACTGGGTGTAGCCCAACCCGTGAGGCACTGGCCCACTTGC
 GGAACCTGACTCAGGCTGCTGGCAAGCGTAGCTATGTGTTGGCCCTGGGGCGGCCACCCCTGCCAAGCT
 TGCCAACCTCCCTGAGGTGGATGCTTTGTGCTATTAGCCTGTCTCTGGGTGCTTAGCCCCCAGCTT
 TCTGGTAGCTTCTCCAGCCTATACTGGCACCATGTGAGCTGGAAGCTGCCTGCAACCCTGCCTGGCCAC
 CTCCAGGCCTGGCTCCCCACCTCACACATTATGCGGACTATTGCCTGGCTCTCCCTTCCAGTGGCTCT
 CCCACCCTGAGTCAGAGCTGTGGGAAACCCAGACGTGCACTACTGGAGATCTCCGACCCCA
 CCTGCCTGGAAGTCATCAATGATCATGGAAGCTTGGCTGTGACCCACGGCCCCAGCTGGAGCTGGCTG
 AGAGCAGTCTGCAGCCTCATTCTTAGTTCGCGAGCTGGCAAGGGCTGGAGCCCCGCTGGGTGAGAC
 GCCAGTGACAGAAGCTGTGAGTGAAGACGAGGGATTGCCATCGCCTATGAGGATGAGGGAAGCGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201382 protein sequence
 Red=Cloning site Green=Tags(s)

MESMFSSPAEALQRETGVPGLLTPLDLDGVYELERVAGFVRDLGCERVALQFPDQLLGDVAVAARLE
 ETTGSKMFI LGDTAYGSCVDVLGAEQAGAQUALIHFGPACLSPPARPLPVAFVLRQRSVALELCVKA
 QNPDPKAPVLLSEPAHALEALATLLRPRYLDLLVSSPAFPQPVGSLSPEMPLERFGRRRFLAPGRR
 LEEYGAFFYVGGSKASPDLDLDPDLRLLLLGWAPGQPFSSCCPDTGKTQDEGARAGRLRARRRYL
 VERARDARVVGLLAGTLGVAQHREALAHLRNLQAAGKRSYVVALGRPTPAKLANFPEVDVFLACPL
 GALAPQLSGSFFQPI LAPCELEAACNPWPPPGLAPHLTHYADLLPGSPFHVALPPPESELWETPDV
 SLITGDLRPPPAWKSSNDHGSLALTPRPQLELAESSPAASFSSRSWQGLEPRLGQTPVTEAVSGRR
 GIAIAYEDEGSG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6402_a02.zip

Restriction Sites:

SgfI-MluI

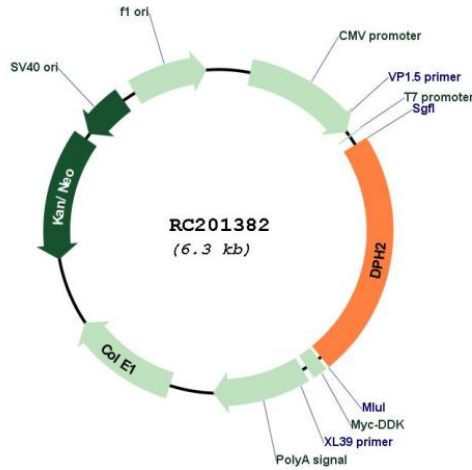
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001384

ORF Size: 1467 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.

RefSeq: [NM_001384.5](#)

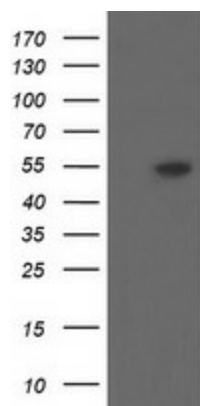
RefSeq Size: 2513 bp

RefSeq ORF: 1470 bp

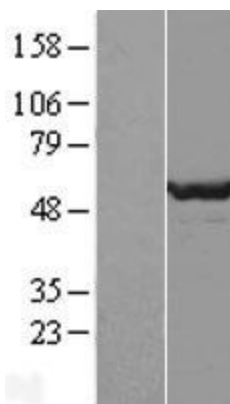
Locus ID: 1802
UniProt ID: [Q9BQC3](#)
Domains: Diphthamide_syn
MW: 52.1 kDa

Gene Summary: This gene is one of two human genes similar to the yeast gene dph2. The yeast gene was identified by its ability to complement a diphthamide mutant strain, and thus probably functions in diphthamide biosynthesis. Diphthamide is a post-translationally modified histidine residue present in elongation factor 2 (EF2) that is the target of diphtheria toxin ADP-ribosylation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]

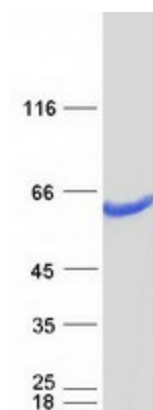
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DPH2 (Cat# RC201382, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DPH2 (Cat# [TA504855]). Positive lysates [LY419990] (100ug) and [LC419990] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419990]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201382 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DPH2 protein (Cat# [TP301382]). The protein was produced from HEK293T cells transfected with DPH2 cDNA clone (Cat# RC201382) using MegaTran 2.0 (Cat# [TT210002]).