

Product datasheet for **RC220529**

DPH5 (NM_015958) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DPH5 (NM_015958) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DPH5
Synonyms:	AD-018; CGI-30; HSPC143; NP015
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220529 representing NM_015958 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTTTATCTCATCGGGTTGGCCTGGGAGATGCCAAGGACATCACAGTCAAGGCCTGGAAGTTGTTA
GACGCTGCAGTCGAGTGTATCTGGAAGCCTACACCTCAGTCCTAACTGTAGGGAAGGAAGCCTTGAAGA
GTTTTATGGAAGAAAATTGGTTGTGCTGATAGAGAAGAAGTGAACAAGAAGCAGATAATATTTAAAG
GATGCTGATATCAGTGATGTTGCATTCCTGTGGTTGGTATCCATTTGGGGCCACAACACACAGTGATC
TTGTTCTAAGAGCAACAAAGCTGGGAATTCCTTATAGAGTTATTCACAATGCCTCCATAATGAATGCTGT
AGGCTGCTGTGGTTTACAGTTATATAAGTTGGAGAGACAGTTTCTATTGTTTTTGGACAGACACTTGG
AGACCAGAAAGCTTCTTTGACAAAGTGAAGAAGAACAGACAAAATGGCATGCACACATTATGTTTACTAG
ACATCAAAGTAAAGGAGCAGTCTTTGAAAAATCTAATCAAGGGAAGGAAGATCTATGAACCTCCACGGTA
TATGAGTGTAACCAAGCAGCCAGCAGCTTCTGGAGATTGTTCAAAATCAAAGAATACGAGGAGAAGAA
CCAGCAGTTACCGAGGAGACACTTTGTGTTGGCTTAGCCAGGGTTGGAGCCGACGACCAGAAAATTCGAG
CAGGCACCTTAAGGCAATGTGCACTGTGGACTGGGAGAACCATTGCATTCCTTGATCATCACAGGAGG
CAGCATAACATCCAATGGAGATGGAGATGCTAAGTCTGTTTTCCATACCAGAAAATAGCTCAGAATCTCAA
AGCATCAATGGACTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220529 representing NM_015958
Red=Cloning site Green=Tags(s)

MLYLIGLGLGDAKDITVKGLEVVRRCSRYYLEAYTSVLTVGKEALEEFYGRKLVVADREEVEQEADNLIK
 DADISDVAFLVVGDPFGATTTHSDLVLRATKLGIPYRVIHNASIMNAVGCCGLQLYKFGETVSIVFWTDTW
 RPESFFDKVKKNRQNGMHTLCLLDIKVKEQSLENLIKGRKIYEPYRMSVNQAAQQLLEIVQNQRIRGEE
 PAVTEETLCVGLARVGADDQKIAAGTLRQMCTVDLGEPLHSLIITGGSIHPMEMEMLSLFSIPENSSESQ
 SINGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8041_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_015958

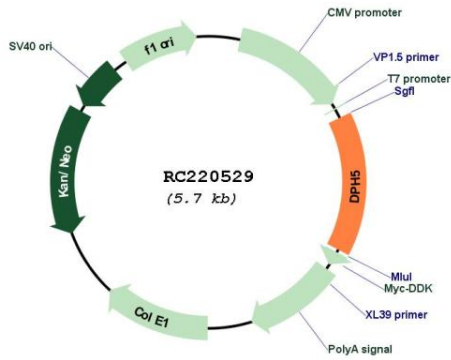
ORF Size: 855 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

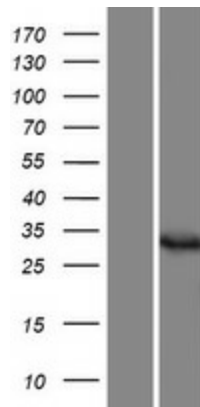
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_015958.3
RefSeq Size:	1457 bp
RefSeq ORF:	858 bp
Locus ID:	51611
UniProt ID:	Q9H2P9
Cytogenetics:	1p21.2
Domains:	TP_methylase
MW:	31.5 kDa
Gene Summary:	<p>This gene encodes a component of the diphthamide synthesis pathway. Diphthamide is a post-translationally modified histidine residue found only on translation elongation factor 2. It is conserved from archaeobacteria to humans, and is targeted by diphtheria toxin and Pseudomonas exotoxin A to halt cellular protein synthesis. The yeast and Chinese hamster homologs of this protein catalyze the trimethylation of the histidine residue on elongation factor 2, resulting in a diphthine moiety that is subsequently amidated to yield diphthamide. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p>

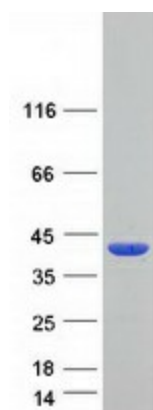
Product images:



Circular map for RC220529



Western blot validation of overexpression lysate (Cat# [LY414310]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220529 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DPH5 protein (Cat# [TP320529]). The protein was produced from HEK293T cells transfected with DPH5 cDNA clone (Cat# RC220529) using MegaTran 2.0 (Cat# [TT210002]).